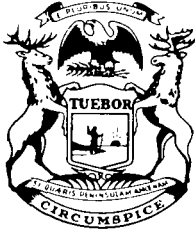




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Michigan Environmental Response Act

1982 Public Act 307
as amended
and Administrative Rules

Michigan Department of Natural Resources
Environmental Response Division



11/91

PREFACE

The *Environmental Response Act and related Administrative Rules* are reprinted under the editorial direction of the Legislative Service Bureau from the text of the *Michigan Compiled Laws*, supplemented through Act 103 of the 1991 Regular Session of the Michigan Legislature and from the text of the *Michigan Administrative Code*, supplemented through Issue No. 7 of the 1991 Michigan Register.

Materials in boldface type, particularly catchlines and annotations to the statutes, are not part of the statutes as enacted by the Legislature.

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Michigan Department of Natural Resources 

TABLE OF CONTENTS

THE ENVIRONMENTAL RESPONSE ACT

Act 307 of 1982

299.601	Legislative finding and declaration.		
299.602	Short title.		
299.603	Definitions.		
299.604	Federal assistance.		
299.605	Coordination of activities; rules.		
299.606	Duties of department; removal of site from list; "list" defined.	299.610f	Action to abate danger or threat; administrative order; noncompliance; liability; petition for reimbursement; action in court of claims; evidence.
299.607	Level of funding; recommendation of governor.		
299.608	Repealed.	299.611	Repealed.
299.608a	Tearing down, removing, or destroying sign or notice as misdemeanor; penalty.	299.611a	Schedule; remedial action plan; notice; action by department.
299.609	Environmental response fund; establishment; administration; revenue; unexpended balance to be carried forward.	299.611b	Office of environmental cleanup facilitation; creation; duties; assignment and duties of facilitator; sharing costs of facilitator.
299.609a	Michigan unclaimed bottle fund.	299.611c	Recommendations for resolving items of difference; written statements; meeting; recommendations as part of administrative record; additional discussions; facilitation conference; facilitating agreement; remedial action plan; alternative plan; implementation; standing of participants in allocation process in civil action to challenge recommendations; assessing costs of facilitation; attorney fees; recovering costs of response activities; cost of remedial action; rebuttable presumption; action by department.
299.609b	Long-term maintenance trust fund board.		
299.609c	Long-term maintenance trust fund.	299.611d	Science advisory council; creation; appointment, qualifications, and terms of members; removal of member; restriction on employment; recommendations; information.
299.609d	Study.		
299.610	Appropriation; purposes; use of fund; recommendation by governor.	299.611e	Report to legislature.
299.610a	Release; duties of owner, operator, or holder of easement interest; applicability of subsections (1) and (2); additional actions; completion of response activities; document; failure to notify department or submission of false or misleading information; civil fine; reimbursement of expenses of state or local unit of government; prohibitions.	299.611g	Definitions; applicability of section; approval of remedial action plan; notice; list; commencement of allocation process; participation; schedule; plan; negotiations; agreement; copy; consent order; allocation review panel; information; determination; acceptance or rejection; funding uncollectible percentage; construction of section; evidence; jurisdiction; limitation; administrative order; action for reimbursement; costs; moratorium; authority not limited; recovery of costs; loans to small businesses; rules; creation and responsibility of orphan share administration; staff and services.
299.610b	Notifying department of agriculture; information; definition.		
299.610c	Transfer of interest in real property; notice; certification.		
299.610d	Duties of person required to furnish information; right to enter public or private property; purposes; duties of person entering public or private property; copies of sample analyses, photographs, or videotapes; completion of inspections and investigations; refusing entry or information; powers of attorney general; injunction; civil fine; availability of information to public; protection of information; administrative subpoena; witness fees and mileage; court order; contempt; "information" defined.		
299.610e	Response activity; purposes of remedial action; alternatives; preferred remedial		

TABLE OF CONTENTS

299.612	Liability for response activity costs; amounts recoverable; permitted release; obligations or liability under other state law; action to abate danger or threat; jurisdiction; evidence.	299.614	Covenant not to sue generally; future enforcement action.
299.612a	Evidence establishing nonliability under §299.612; "contractual relationship" defined; additional evidence required; effort to minimize liability; liability of previous owner or operator not diminished; liability of state or local unit of government; liability of commercial lending institution; disposal of property by commercial lending institution; assuming ownership or control of property as fiduciary; applicability of defenses to liability; "foreclosure environmental assessment" defined.	299.614a	Redevelopment or reuse of facility; covenant not to sue; conditions; demonstration; limitation; reservation of right to assert claims; irrevocable right of entry; monitoring compliance.
299.612b	Liability of response activity contractor; effect of warranty; liability of employer to employee; exemption of governmental employer from liability; availability of defense; effect of section on liability; definitions.	299.614b	Consent order; settlement.
299.612c	Divisibility of harm and apportionment of liability; liability for indivisible harm; contribution; factors in allocating response activity costs and damages; reallocation of uncollectible amount; effect of consent order; effect of state obtaining less than complete relief; contribution from person not party to consent order; subordinate rights in action for contribution.	299.615	Civil action; jurisdiction; conditions; notice; awarding costs and fees; rights not impaired; venue.
299.612d	Indemnification, hold harmless, or similar agreement or conveyance; subrogation.	299.615a	Grant program; rules; eligibility for grants; availability of appropriations.
299.613	Limitations on liability; circumstances requiring total costs and damages.	299.616	Additional relief; providing copy of complaint to attorney general; jurisdiction; judicial review; intervenor.
		299.616a	Unpaid costs and damages as lien on facility; priority; commencement and sufficiency of lien; petition; notice of hearing; increased value as lien; perfection, duration, and release of lien; document stating completion of response activities.
		299.616b	Applicability of penalties; conduct constituting felony; penalties; jurisdiction; criminal liability for substantial endangerment to public health, safety, or welfare; determination; knowledge attributable to defendant; award; rules; definition.
		299.617	Limitation periods.
		299.618	Citizens review board; establishment; appointment and qualifications of members; chairperson; report; recommendations; evaluation; disbanding of review board; funding; compensation.

THE ENVIRONMENTAL RESPONSE ACT

Act 307 of 1982

AN ACT to provide for the identification, risk assessment, and priority evaluation of environmental contamination at certain sites in this state; to provide for response activity at certain facilities and sites; to prescribe the powers and duties of the governor, certain state agencies and officials, and other persons; to provide for the promulgation of rules; to require record notice regarding the status of certain facilities; to create certain funds and provide for their expenditure; to provide for public participation; to provide for methods of dispute resolution; to authorize grants, loans, and awards; to create certain boards, councils, and offices and to prescribe their powers and duties; to provide for judicial review; and to provide certain remedies and penalties.

History: 1982, Act 307, Imd. Eff. Oct. 13, 1982;—Am. 1987, Act 166, Eff. Jan. 1, 1988;—Am. 1989, Act 157, Imd. Eff. July 27, 1989—Am. 1990, Act 233, Eff. July 1, 1991.

The People of the State of Michigan enact:

299.601 Legislative finding and declaration.

Sec. 1. The legislature hereby finds and declares:

(a) That there exist in this state certain facilities containing hazardous substances that pose a danger to the public health, safety, or welfare, or to the environment of this state.

(b) That there is a need to provide for a method of eliminating the danger of environmental contamination caused by the existence of hazardous substances at sites within the state.

(c) That it is the purpose of this act to provide for appropriate response activity to eliminate the environmental contamination caused by the presence of hazardous substances at sites within the state.

(d) That there is a need for additional administrative and judicial remedies to supplement existing statutory and common law remedies.

(e) That the responsibility for the cost of response activities pertaining to a release or threat of release and repairing injury, destruction, or loss to natural resources caused by a release or threat of release should not be placed upon the public except when funds cannot be collected from, or a response activity cannot be undertaken by, a person liable under this act, in conjunction with an appropriate contribution, if applicable, from a fund administered by the orphan share administration.

(f) That to the extent possible, consistent with requirements under this act and rules promulgated under this act, response activities shall be undertaken by persons liable under this act.

(g) That this act is intended to provide remedies for facilities posing any threat to the public health, safety, or welfare, or to the environment, regardless of whether the release or threat of release of a hazardous substance occurred before or after the effective date of this act, and for this purpose this act shall be given retroactive application. However, criminal and civil penalties provided in the amendatory act that added this subdivision shall only apply to violations of this act that occur after the effective date of the amendatory act that added this subdivision.

(h) That money should be appropriated by the legislature for response activities taking into consideration the order that sites are on the list described in section 6(1)(d) and

applicable provisions of the environmental protection bond implementation act, Act No. 328 of the Public Acts of 1988, being sections 299.671 to 299.685 of the Michigan Compiled Laws.

(i) That a site that is owned by the federal government, the state, or a local unit of government, or a site where a release or threat of release is caused by the federal government, the state, or a local unit of government, should not be treated differently in terms of the expenditure of money for response activities than any other site on the list described in section 6(1)(d).

(j) That if a person that may be liable under section 12 is the state or a local unit of government, this act should be enforced by the attorney general and the department in the same manner as it would be for any other person that may be liable under section 12.

(k) That prior to expending money to undertake remedial action at a site, the department should assure a private or public funding source, or a combination of funding sources, that is sufficient to assure that the response activities at the site proceed without interruptions caused by insufficient financial resources until the site meets or exceeds the standards established by the department for that site.

(l) That this act is not intended to impose penalties or exemplary damages upon parties conducting response activities pursuant to a decree or order to which the United States is a party.

(m) That this act is intended to foster the redevelopment and reuse of vacant manufacturing facilities and abandoned industrial sites that have economic development potential, if that redevelopment or reuse assures the protection of the public health, safety, welfare, and the environment.

History: 1982, Act 307, Imd. Eff. Oct. 13, 1982;—Am. 1990, Act 234, Eff. July 1, 1991.

Cited in other sections: Section 299.601 et seq. is cited in §§ 299.419b, 299.678, 299.847, and 333.26219.

Administrative Rules: R 299.5101 et seq. of the Michigan Administrative Code.

299.602 Short title.

Sec. 2. This act shall be known and may be cited as “the environmental response act”.

History: 1982, Act 307, Imd. Eff. Oct. 13, 1982.

299.603 Definitions.

Sec. 3. As used in this act:

(a) “Act of God” means an unanticipated grave natural disaster or other natural phenomenon of an exceptional, inevitable, and irresistible character, the effects of which could not have been prevented or avoided by the exercise of due care or foresight.

(b) “Agricultural property” means real property used for farming in any of its branches, including cultivating of soil; growing and harvesting of any agricultural, horticultural, or floricultural commodity; dairying; raising of livestock, bees, fish, fur-bearing animals, or poultry; turf and tree farming; and performing any practices on a farm as an incident to, or in conjunction with, these farming operations. Agricultural property does not include property used for commercial storage, processing, distribution, marketing, or shipping operations.

(c) “Attorney general” means the department of the attorney general.

(d) “Commercial lending institution” means a state or nationally chartered bank, a state or federally chartered savings and loan association or savings bank, or a state or

federally chartered credit union, or other state or federally chartered lending institution or a regulated affiliate or a regulated subsidiary of any of these entities.

(e) "Department" means the director of the department of natural resources or his or her designee.

(f) "Director" means the director of the department of natural resources.

(g) "Directors" means the directors or their designees of the departments of natural resources, public health, agriculture, and state police.

(h) "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any hazardous substance into or on any land or water so that the hazardous substance or any constituent of the hazardous substance may enter the environment or be emitted into the air or discharged into any groundwater or surface water.

(i) "Enforcement costs" means court expenses, reasonable attorney fees of the attorney general, and other reasonable expenses of an executive department that are incurred in relation to enforcement under this act or rules promulgated under this act, or both.

(j) "Environment" or "natural resources" means any land, surface water, groundwater, subsurface, strata, air, fish, wildlife, or biota within the state.

(k) "Environmental contamination" means the release of a hazardous substance, or the potential release of a discarded hazardous substance, in a quantity, which is or may become injurious to the environment, or to the public health, safety, or welfare.

(l) "Evaluation" means those activities including but not limited to investigation, studies, sampling, analysis, development of feasibility studies, and administrative efforts, that are needed to determine the nature, extent, and impact of a release or threat of release and necessary response activities.

(m) "Facility" means any area, place, or property where a hazardous substance has been released, deposited, stored, disposed of, or otherwise comes to be located.

(n) "Feasibility study" means a process for developing, evaluating, and selecting appropriate response activities.

(o) "Fund" means the environmental response fund established in section 9, except as otherwise provided in section 11f.

(p) "Hazardous substance" means 1 or more of the following:

(i) A chemical or other material which is or may become injurious to the public health, safety, or welfare or to the environment.

(ii) "Hazardous substance" as defined in the comprehensive environmental response, compensation, and liability act of 1980, Public Law 96-510, 94 Stat. 2767.

(iii) "Hazardous waste" as defined in the hazardous waste management act, Act No. 64 of the Public Acts of 1979, being sections 299.501 to 299.551 of the Michigan Compiled Laws.

(iv) "Petroleum" as defined in the leaking underground storage tank act, Act No. 478 of the Public Acts of 1988, being sections 299.831 to 299.850 of the Michigan Compiled Laws.

(q) "Interim response activity" means the cleanup or removal of a released hazardous substance or the taking of other actions, prior to the implementation of a remedial action, as may be necessary to prevent, minimize, or mitigate injury to the public health, safety, or welfare, or to the environment. Interim response activity also includes, but is not limited to, measures to limit access, replacement of water supplies, and temporary relocation of people as determined to be necessary by the department. In addition, interim

response activity means the taking of other actions as may be necessary to prevent, minimize, or mitigate a threatened release.

(r) "Local health department" means that term as defined in section 1105 of the public health code, Act No. 368 of the Public Acts of 1978, being section 333.1105 of the Michigan Compiled Laws.

(s) "Local unit of government" means a county, city, township, or village, an agency of a local unit of government, an authority or any other public body or entity created by or pursuant to state law. Local unit of government does not include the state or federal government or a state or federal agency.

(t) "Operator" means a person that is in control of or responsible for the operation of a facility. Operator does not include any of the following:

(i) A person that, without participating in the management of the facility, holds indicia of ownership primarily to protect the person's security interest in the facility, including, but not limited to, a vendor's interest under a recorded land contract. For the purposes of this act, a commercial lending institution shall not be construed to be participating in the management of a facility by extending credit, providing financial services, providing financial advice, or supervising a plan to resolve financial difficulties for an operator, or conducting or causing to be conducted a prudent or legally required review or investigation of environmental matters related to the facility or the operator of the facility, if the actions of the commercial lending institution do not suggest, condone, or encourage the treatment or handling of a hazardous substance by the operator in a manner that results in a release.

(ii) The state or a local unit of government that acquired ownership or control of the facility involuntarily through bankruptcy, tax delinquency, abandonment, or other circumstances in which the government involuntarily acquires title or control by virtue of its governmental function, a local unit of government to which ownership or control of the facility is transferred by the state, or the state or a local unit of government that acquired ownership or control of the facility by seizure, receivership, or forfeiture pursuant to the operation of law or by court order. In case of an acquisition described in this subparagraph by the state or a local unit of government, operator means a person that was in control of or responsible for operation of the facility immediately before the state or local unit of government acquired ownership or control. The exclusion provided in this subparagraph shall not apply to the state or a local unit of government that caused or contributed to the release or threat of a release from the facility.

(iii) The operator of an underground storage tank system, as defined in the leaking underground storage tank act, Act No. 478 of the Public Acts of 1988, being sections 299.831 to 299.850 of the Michigan Compiled Laws, from which there is a release or threat of release if all of the following conditions are met:

(A) The operator reported the release or threat of release to the department of state police, fire marshal division, within 24 hours after confirmation of the release or threat of release.

(B) The release or threat of release at the facility is solely the result of a release or threat of release of a regulated substance as defined in Act No. 478 of the Public Acts of 1988 from an underground storage tank system.

(C) The operator is in compliance with the requirements of Act No. 478 of the Public Acts of 1988, and any promulgated rules or any order, agreement, or judgment issued or entered into pursuant to that act.

(iv) A state or local unit of government that holds or acquires an easement interest in a facility, holds or acquires an interest in a facility by dedication in a plat, or by dedication pursuant to Act No. 283 of the Public Acts of 1909, being sections 220.1 to 239.6 of the Michigan Compiled Laws. The exclusion provided in this subparagraph shall not apply to the state or a local unit of government that holds an easement or dedication if the state or that local unit of government caused or contributed to a release or threat of release, or if equipment owned or operated by the state or that local unit of government caused or contributed to the release or threat of release.

(v) A person that holds an easement interest in a facility for the purpose of conveying or providing goods or services, including, but not limited to, utilities, sewers, roads, railways, and pipelines; or a person that acquires access through an easement. The exclusion provided in this subparagraph shall not apply to a person that holds an easement if that person caused or contributed to a release or threat of release, or if equipment owned or operated by that person caused or contributed to the release or threat of release.

(vi) A person that satisfies all of the following:

(A) The release was caused solely by a third party who is not an employee or agent of the person, or whose action was not associated with a contractual relationship with the person.

(B) The hazardous substance was not deposited, stored, or disposed of on the property upon which the person operates.

(C) The person at the time of transfer of the right to operate on the property discloses any knowledge or information concerning the general nature and extent of the release as required in section 10c.

(u) "Owner" means a person that owns a facility. Owner does not include any of the following:

(i) A person that, without participating in the management of the facility, holds indicia of ownership primarily to protect the person's security interest in the facility, including, but not limited to, a vendor's interest under a recorded land contract. For the purposes of this act, a commercial lending institution shall not be construed to be participating in the management of a facility by extending credit, providing financial services, providing financial advice, or supervising a plan to resolve financial difficulties for an owner, or conducting or causing to be conducted a prudent or legally required review or investigation of environmental matters related to the facility or the owner of the facility, if the actions of the commercial lending institution do not suggest, condone, or encourage the treatment or handling of a hazardous substance by the owner in a manner that results in a release.

(ii) The state or a local unit of government that acquired ownership or control of the facility involuntarily through bankruptcy, tax delinquency, abandonment, or other circumstances in which the government involuntarily acquires title or control by virtue of its governmental function, a local unit of government to which ownership or control of the facility is transferred by the state, or the state or a local unit of government that acquired ownership or control of the facility by seizure, receivership, or forfeiture pursuant to the operation of law or by court order. In case of an acquisition described in this subparagraph by the state or a local unit of government, owner means any person who owned or controlled activities at the facility immediately before the state or local unit of government acquired ownership or control. The exclusion provided in this

subparagraph shall not apply to the state or a local unit of government that caused or contributed to the release or threat of a release from the facility.

(iii) A person that satisfies all of the following:

(A) The release was caused solely by a third party, who is not an employee or agent of the person, or whose action was not associated with a contractual relationship with the person.

(B) The hazardous substance was not deposited, stored, or disposed of on that person's property.

(C) The person at the time of transfer of the property discloses any knowledge or information concerning the general nature and extent of the release as required in section 10c.

(iv) The owner of an underground storage tank system, as defined in the leaking underground storage tank act, Act No. 478 of the Public Acts of 1988, being sections 299.831 to 299.850 of the Michigan Compiled Laws, from which there is a release or threat of release if all of the following conditions are met:

(A) The owner reported the release or threat of release to the department of state police, fire marshal division, within 24 hours after confirmation of the release or threat of release.

(B) The release or threat of release at the facility is solely the result of a release or threat of release of a regulated substance as defined in Act No. 478 of the Public Acts of 1988 *from an underground storage tank system.*

(C) The owner is in compliance with the requirements of Act No. 478 of the Public Acts of 1988, and any promulgated rules or any order, agreement, or judgment issued or entered pursuant to that act.

(v) A state or local unit of government that holds or acquires an easement interest in a facility, holds or acquires an interest in a facility by dedication in a plat, or by dedication pursuant to Act No. 283 of the Public Acts of 1909, being sections 220.1 to 239.6 of the Michigan Compiled Laws. The exclusion provided in this subparagraph shall not apply to the state or a local unit of government that holds an easement or dedication if that state or local unit of government caused or contributed to a release or threat of release, or if equipment owned or operated by the state or that local unit of government caused or contributed to the release or threat of release.

(vi) A person that holds an easement interest in a facility for the purpose of conveying or providing goods or services, including, but not limited to, utilities, sewers, roads, railways, and pipelines; or a person that acquires access through an easement. The exclusion provided in this subparagraph shall not apply to a person that holds an easement if that person caused or contributed to a release or threat of release, or if equipment owned or operated by that person caused or contributed to the release or threat of release.

(vii) A person that holds only subsurface mineral rights to the property and has not caused or contributed to a release on the property.

(v) "Permitted release" means 1 or more of the following:

(i) A release in compliance with an applicable, legally enforceable permit issued under state law.

(ii) A lawful and authorized discharge into a permitted waste treatment facility.

(iii) A federally permitted release as defined in the comprehensive environmental response, compensation, and liability act of 1980, Public Law 96-510, 94 Stat. 2767.

(w) "Person" means an individual, sole proprietorship, partnership, joint venture, trust, firm, joint stock company, corporation, including a government corporation, association, local unit of government, commission, the state, a political subdivision of the state, an interstate body, the federal government, a political subdivision of the federal government, or any other legal entity.

(x) "Release" includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing of a hazardous substance into the environment, or the abandonment or discarding of barrels, containers, and other closed receptacles containing a hazardous substance. Release does not include any of the following:

(i) A release that results in exposure to persons solely within a workplace, with respect to a claim that these persons may assert against their employers.

(ii) Emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, or vessel.

(iii) A release of source, by-product, or special nuclear material from a nuclear incident, as those terms are defined in the atomic energy act of 1954, chapter 1073, 68 Stat. 919, if the release is subject to requirements with respect to financial protection established by the nuclear regulatory commission under section 170 of the atomic energy act of 1954, chapter 1073, 71 Stat. 576, 42 U.S.C. 2210, or, any release of source by-product, or special nuclear material from any processing site designated under section 102(a)(1) title I or 302(a) of title III of the uranium mill tailings radiation control act of 1978, 42 U.S.C. 7912 and 7942.

(iv) If applied according to label directions and according to generally accepted agricultural and management practices, the application of a fertilizer, soil conditioner, agronomically applied manure, or a pesticide, or a combination of these substances. As used in this subparagraph, fertilizer and soil conditioner have the meaning given to these terms in the fertilizer act of 1975, Act No. 198 of the Public Acts of 1975, being sections 286.751 to 286.767, and pesticide has the meaning given to that term in the pesticide control act, Act No. 171 of the Public Acts of 1976, being sections 286.551 to 286.581 of the Michigan Compiled Laws.

(y) "Remedial action" includes, but is not limited to, cleanup, removal, containment, isolation, destruction, or treatment of a hazardous substance released or threatened to be released into the environment, monitoring, maintenance, or the taking of other actions that may be necessary to prevent, minimize, or mitigate injury to the public health, safety, or welfare, or to the environment.

(z) "Remedial action plan" means a work plan for performing remedial action under this act.

(aa) "Response activity" means evaluation, interim response activity, remedial action, or the taking of other actions necessary to protect the public health, safety, or welfare, or the environment, or the natural resources. Response activity also includes health assessments or health effect studies carried out under the supervision, or with the approval of, the department of public health, and enforcement actions related to any response activity.

(bb) "Response activity costs" or "costs of response activity" means all costs incurred in taking or conducting a response activity, including enforcement costs.

(cc) "Rule" means a rule promulgated pursuant to the administrative procedures act of 1969, Act No. 306 of the Public Acts of 1969, being sections 24.201 to 24.328 of the Michigan Compiled Laws.

(dd) "Science advisory council" means the science advisory council created in section 11d.

(ee) "Site" means the location of environmental contamination.

(ff) "Threatened release" or "threat of release" means any circumstance that may reasonably be anticipated to cause a release.

History: 1982, Act 307, Imd. Eff. Oct. 13, 1982;—Am. 1984, Act 388, Imd. Eff. Dec. 28, 1984;—Am. 1990, Act 234, Eff. July 1, 1991.

Cited in other sections: Section 299.603 is cited in §§ 213.54 and 299.621.

Administrative Rules: R 299.5101 et seq. of the Michigan Administrative Code.

299.604 Federal assistance.

Sec. 4. The department shall seek federal assistance for response activities required at facilities in this state.

History: 1982, Act 307, Imd. Eff. Oct. 13, 1982;—Am. 1990, Act 234, Eff. July 1, 1991.

299.605 Coordination of activities; rules.

Sec. 5. The department shall coordinate all activities required under this act and shall promulgate rules to provide for the performance of response activities, to reflect and effectuate the powers and duties of the department under this act, and as otherwise necessary to carry out the requirements of this act.

History: 1982, Act 307, Imd. Eff. Oct. 13, 1982;—Am. 1990, Act 234, Eff. July 1, 1991.

Administrative Rules: R 299.5101 et seq. of the Michigan Administrative Code.

299.606 Duties of department; removal of site from list; "list" defined.

Sec. 6. (1) The department shall do all of the following:

(a) Upon discovery of a site, identify and evaluate the site for the purpose of assigning to the site a priority score for response activities. Upon assignment to the site of a priority score for response activity, the site shall retain the same score assignment unless a substantial body of data is provided to or available to the department indicating to the department that a substantial change in the score is warranted, and a person requests rescoring for a site during the annual public comment period following the publication of the list, or the department determines that rescoring is appropriate.

(b) Develop 1 or more numerical risk assessment models for assessing the relative present and potential hazards posed to the public health, safety, or welfare, or to the environment by each site identified pursuant to subdivision (a). The model, or models if more than 1 is developed, shall provide a fair and objective site specific numerical score designating the relative risk posed to the public health, safety, or welfare, or to the environment of each site.

(c) Include in rules promulgated under this act the numerical risk assessment model, or models if more than 1 is developed. The numerical risk assessment model or models shall be reviewed annually by the department to identify potential improvements.

(d) Submit to the legislature in November of each year a list strictly derived from the numerical risk assessment model or models provided for in this section that does all of the following:

(i) Includes all sites.

(ii) Categorizes sites according to the response activity at the site at the time of listing and according to categories established by rules.

(iii) Indicates whether the owner of a site is the federal government, the state, or a local unit of government.

(e) Maintain and make available to the public upon request records regarding sites where remedial actions have been completed, including sites where land use restrictions have been imposed, if the records are not otherwise protected from disclosure by law.

(f) Submit the list for public hearings geographically dispersed throughout the state. These hearings shall be completed at least 30 days before the governor's annual budget recommendations to the legislature.

(g) Report at least annually to the legislature and the governor those sites that have been removed from the list pursuant to this section and rules promulgated under this act and the source of the funds used to undertake the response activity at each of the sites.

(h) Publish a notice annually in the Michigan register of the availability of, and submit annually to the standing committees of the senate and the house of representatives that address legislation pertaining to the environment and the natural resources of this state, a report describing the response activity that is undertaken at each site where response activity is or has occurred during the reporting year and the nature of the contamination that resulted in the necessity for that response activity.

(2) Following the effective date of the amendatory act that added this subsection, if the department has information identifying the owner of property that may be listed as a site, the department shall make reasonable efforts to notify in writing the owner of the property and the local health department and the city, village, or township in which the site is located prior to including the site on the list. This subsection shall not be construed to provide a defense to liability.

(3) A site shall be removed from the list when the department's review of a site shows that the site does not meet the criteria specified in rules promulgated under this act. A site shall not be removed from this list until any necessary response activity that meets the standards specified in rules promulgated under this act is complete.

(4) A person may request that a site be removed from the list by submitting a petition to the department. A petition shall include all of the following information:

(a) A description and history of the site.

(b) A description of the nature and extent of the environmental contamination that existed at the site at the time the site was included on the list.

(c) A description of the response activity undertaken to remedy the release or threat of a release, consistent with rules promulgated under this act, or a description of the investigation conducted that supports the person's petition that the site should be removed from the list without further response activity.

(d) An analysis of the effectiveness of the response activity undertaken to remediate the release or threat of release. The analysis shall include site specific analytical data that documents the effectiveness of the response activity.

(e) Other site-specific information required by the department.

(5) A person seeking the removal of a site from the list shall prepare and submit to the department the documentation required by subsection (4). If response activities have been conducted by the department at the site, the department shall prepare the documentation required by subsection (4).

(6) Within 30 days after receipt of the petition, the department shall determine whether a petition submitted under subsection (4) is administratively complete. Within 60 days after a determination that a petition is administratively complete, the petitioner shall be notified by the department of the department's intent to remove the site from the list, or the petitioner shall be notified that the petition for removal of the site from the list does not meet the criteria for removal of the site from the list as determined by rule. Removal of sites from the list shall be accomplished as part of the process described in rules promulgated under this act. However, if the department concludes pursuant to subsection (3) that the circumstances warrant removal of the site from the list before or at the next regularly scheduled hearing to be held in accordance with rules promulgated under this act, the department shall prepare a notice of intent to remove the site from the list. A notice of intent shall include information considered appropriate by the department and shall be published in at least 1 newspaper of general circulation that serves the area of the site and the notice of intent shall be provided to the local health department and the city, village, or township in which the site is located. Public comment on the notice of intent to remove the site from the site list shall be accepted for a period of not less than 30 days from the date of publication. The department may hold a public hearing on the proposed action.

(7) The department shall make a final determination whether to include the site on the next list. The department shall consider any comments received in response to the notice described in subsection (6).

(8) The department shall notify the person who requested that the site be removed from the list and the local health department, and the city, village, or township in which the site is located of the decision within 45 days of the end of the public comment period provided for in the notice published pursuant to subsection (6).

(9) As used in this section, "list" means the list described in subsection (1)(d).

History: 1982, Act 307, Imd. Eff. Oct. 13, 1982;—Am. 1990, Act 234, Eff. July 1, 1991.

Cited in other sections: Section 299.606 is cited in § 299.507a.

Administrative Rules: R 299.5101 et seq. of the Michigan Administrative Code.

299.607 Level of funding; recommendation of governor.

Sec. 7. (1) The governor shall include in his or her annual budget recommendations to the legislature a recommended level of funding to provide for the activities necessary to implement this act.

(2) The governor's recommendations under this section shall be accompanied by a site specific description of the extent of known or suspected environmental contamination, the recommended response activities to be undertaken, and an estimate of cost of those response activities.

History: 1982, Act 307, Eff. Jan. 1, 1983;—Am. 1990, Act 234, Eff. July 1, 1991.

299.608 Repealed. 1990, Act 234, Eff. July 1, 1991.

Compiler's note: The repealed section pertained to compensation and reimbursement.

299.608a Tearing down, removing, or destroying sign or notice as misdemeanor; penalty.

Sec. 8a. A person who willfully tears down, removes, or destroys any sign or notice warning of the presence of hazardous substances or marking boundaries of a site of

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whether environmental contamination subject to response activity under this act is guilty of a misdemeanor, punishable by imprisonment for not more than 90 days, or a fine of not more than \$500.00, or both.

History: Add. 1987, Act 166, Eff. Jan. 1, 1988.

299.609 Environmental response fund; establishment; administration; revenue; unexpended balance to be carried forward.

Sec. 9. (1) An environmental response fund is established in the department of the treasury. The environmental response fund shall be administered by the governor or the governor's designee.

(2) The fund shall receive as revenue any money from any source, as appropriated by the legislature and the interest and earnings of the fund shall be credited to the fund.

(3) In addition to the money received under subsection (2), the fund shall receive as revenue money collected by the attorney general in actions filed under this act, collected by the state under this act, or collected by a person under section 15(2).

(4) An unexpended balance within the fund at the close of the fiscal year shall be carried forward to the following fiscal year.

History: 1982, Act 307, Imd. Eff. Oct. 13, 1982;—Am. 1990, Act 234, Eff. July 1, 1991.

Cited in other sections: Section 299.609 is cited in § 299.866.

299.609a Michigan unclaimed bottle fund.

Sec. 9a. (1) A Michigan unclaimed bottle fund is established as a separate revolving fund in the state treasury. The money in the Michigan unclaimed bottle fund shall not revert to the general fund. The Michigan unclaimed bottle fund shall be administered by the department of treasury.

(2) The Michigan unclaimed bottle fund shall receive money as disbursed by the department of treasury from the bottle deposit fund under section 3c of the Initiated Law of 1976, being section 445.573c of the Michigan Compiled Laws.

(3) The money deposited in the Michigan unclaimed bottle fund shall be used in the manner and for the purposes described in subsection (5).

(4) The Michigan unclaimed bottle fund shall consist of the following:

(a) Money received from the bottle deposit fund under section 3c of the Initiated Law of 1976.

(b) Any interest earned on the money described in subdivision (a) while that money is in the Michigan unclaimed bottle fund.

(5) During the first 10 years that money is disbursed by the bottle deposit fund under section 3c of the Initiated Law of 1976, the money received by the Michigan unclaimed bottle fund and any interest earned on that money shall remain permanently in the Michigan unclaimed bottle fund and shall not be disbursed except that the legislature may appropriate from the unclaimed bottle fund an amount sufficient to cover the reasonable administrative costs incurred by the long-term maintenance trust fund board created in section 9b. After the expiration of those first 10 years, all of the money thereafter deposited annually in the Michigan unclaimed bottle fund, interest earned on the money thereafter deposited annually in the Michigan unclaimed bottle fund, and any interest earned on the money already in that fund shall be disbursed annually by the department of treasury in the following manner:

- (a) One-third to the environmental response fund created in section 9.
- (b) One-third to the long-term maintenance trust fund created in section 9c.
- (c) One-third to the clean Michigan fund created in section 5 of the clean Michigan fund act, Act No. 249 of the Public Acts of 1986, being section 299.375 of the Michigan Compiled Laws.

History: Add. 1989, Act 157, Imd. Eff. July 27, 1989.

Cited in other sections: Section 299.609a is cited in § 445.573c.

299.609b Long-term maintenance trust fund board.

Sec. 9b. (1) Not earlier than 8 years after the effective date of the amendatory act that added this section, the long-term maintenance trust fund board shall be created within the department of natural resources and shall consist of 5 members, 1 of whom is the director of the department of natural resources, or his or her designee, as an ex officio voting member, and 4 of whom shall be appointed by the governor with the advice and consent of the senate in the following manner:

(a) One member of the general public representing the interests of persons involved in advancing the cause of conservation in all its phases including natural resources management, environmental education, enhancement of fish and wildlife population, and prevention of environmental degradation.

(b) One member of the general public representing the interests of environmentally concerned citizens and groups.

(c) Two members of the general public who are knowledgeable in scientific and technical areas of study that are relevant to the long-term monitoring and maintenance of environmental contamination sites.

(2) The term of each appointed member shall be 4 years, except that of those members first appointed 1 shall be appointed for a term of 4 years, 1 shall be appointed for a term of 3 years, 1 shall be appointed for a term of 2 years, and 1 shall be appointed for a term of 1 year. Vacancies shall be filled for the unexpired term in the same manner as the original appointment.

(3) Members of the long-term maintenance trust fund board shall receive per diem compensation and reimbursement for the actual and necessary expenses incurred through the performance of their duties as established annually by the legislature and shall not receive compensation for those expenses from any other source.

(4) The long-term maintenance trust fund board shall elect a chairperson and other officers as are necessary for conducting business.

(5) The long-term maintenance trust fund board shall promulgate rules pursuant to the administrative procedures act of 1969, Act No. 305 of the Public Acts of 1969, being sections 24.201 to 24.328 of the Michigan Compiled Laws, setting forth criteria for projects designed to implement the purposes for which the long-term maintenance trust fund was established.

(6) The long-term maintenance trust fund board shall meet not less than twice per year and shall consider and approve or disapprove recommendations by the department of natural resources for projects designed to implement the purposes for which the long-term maintenance trust fund was established.

(7) The business which the long-term maintenance trust fund board may perform shall be conducted at a public meeting held in compliance with the open meetings act, Act No.

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267 of the Public Acts of 1976, being sections 15.261 to 15.275 of the Michigan Compiled Laws. Public notice of the time, date, and place of the meeting shall be given in a manner required by Act No. 267 of the Public Acts of 1976.

(8) The long-term maintenance trust fund board shall annually file a report with the governor and the legislature summarizing the project proposals reviewed, the amount of expenditures authorized, and the effectiveness of the expenditures in attaining the goals for which the long-term maintenance trust fund is established.

History: Add. 1989, Act 157, Imd. Eff. July 27, 1989.

Compiler's note: In subsection (5) of this section, the reference to "Act 305" evidently should be to Act 306.

299.609c Long-term maintenance trust fund.

Sec. 9c. (1) A long-term maintenance trust fund is established as a separate revolving fund in the state treasury. The money in the long-term maintenance trust fund shall not revert to the general fund. The long-term maintenance trust fund shall be administered by the long-term maintenance trust fund board.

(2) The long-term maintenance trust fund shall receive money as disbursed from the Michigan unclaimed bottle fund created in section 9a.

(3) The money deposited in the long-term maintenance trust fund shall be used in a manner and for the purposes described in rules promulgated by the department of natural resources pursuant to the administrative procedures act of 1969, Act No. 306 of the Public Acts of 1969, being sections 24.201 to 24.328 of the Michigan Compiled Laws, for 1 or more of the following:

(a) The operation, maintenance, and monitoring of sites where the department determines such activities are necessary.

(b) The enforcement of this act or the solid waste management act, Act No. 641 of the Public Acts of 1978, being sections 299.401 to 299.437 of the Michigan Compiled Laws, or both.

(c) Any project the long-term maintenance trust fund board determines by rule as having for its purpose the prevention of environmental contamination.

History: Add. 1989, Act 157, Imd. Eff. July 27, 1989.

299.609d Study.

Sec. 9d. Within 5 months after the effective date of the amendatory act that added this section, the department of management and budget shall enter into a contract for the preparation of a study that analyzes the public and private costs associated with various levels of cleanup standards for response activities under this act. The study shall also include, but is not limited to, an analysis of how quickly various levels of cleanup have been and can be accomplished. The contract shall provide for the study to be completed within 6 months. Prior to entering into the contract, the department of management and budget shall consult with the department of natural resources, the chairperson of the house of representatives committee on conservation, recreation, and environment, and the chairperson of the senate committee on natural resources and environmental affairs regarding the design and the scope of the study. The study required under this section may be conducted in conjunction with other related studies. Upon completion of the study, the department of management and budget shall submit copies of the study to the legislature.

History: Add. 1989, Act 157, Imd. Eff. July 27, 1989.

299.610 Appropriation; purposes; use of fund; recommendation by governor.

Sec. 10. (1) Money required to pay for response activities recommended under this act and to reimburse state departments and agencies for expenditures for those purposes shall be appropriated from the fund and any other source the legislature considers necessary to carry out the requirements of this act.

(2) Money from the fund shall be appropriated only for response activities at facilities that have been subjected to the risk assessment process described in section 6.

(3) The fund may be used for match, operation, and maintenance purposes as required under the comprehensive environmental response, compensation, and liability act of 1980, Public Law 96-510, 94 Stat. 2767, and under subtitle I of the solid waste disposal act, title II of Public Law 89-272, 42 U.S.C. 6991 to 6991i.

(4) The governor shall recommend an annual appropriation for the fund in his or her annual budget recommendations to the legislature.

History: 1982, Act 307, Eff. Jan. 1, 1983; —Am. 1990, Act 233, Eff. July 1, 1991.

299.610a Release; duties of owner, operator, or holder of easement interest; applicability of subsections (1) and (2); additional actions; completion of response activities; document; failure to notify department or submission of false or misleading information; civil fine; reimbursement of expenses of state or local unit of government; prohibitions.

Sec. 10a. (1) Except as provided in subsection (3), an owner or operator of a facility who obtains information that there may be a release at that facility shall immediately take appropriate action, consistent with applicable laws and rules promulgated by the department, to do all of the following:

(a) Confirm the existence of the release.

(b) Determine the nature and extent of the release.

(c) Report the release to the department within 24 hours after obtaining knowledge of the release. The requirements of this subdivision shall apply to reportable quantities of hazardous substances established pursuant to 40 C.F.R. 302.4 (1989), unless the department establishes through rules alternate or additional reportable quantities as necessary to protect the public health, safety, or welfare, or the environment.

(d) Immediately stop or prevent the release at the source.

(e) Immediately identify and eliminate any threat of fire or explosion or any direct contact hazards.

(f) Immediately initiate removal of a hazardous substance that is in a liquid phase, that is not dissolved in water, and that has been released.

(2) Except as provided in subsection (3), a person that holds an easement interest in a portion of a property that has knowledge that there may be a release within that easement shall report the release to the department within 24 hours after obtaining knowledge of the release. Unless the department establishes through rules alternate or additional reportable quantities as necessary to protect the public health, safety, or welfare, or the environment, this subsection shall apply to reportable quantities of hazardous substances established pursuant to 40 C.F.R. 302.4 (1989).

(3) The requirements of subsections (1) and (2) do not apply to a permitted release or a release in compliance with applicable federal, state, and local air pollution control laws.

(4) An owner or operator of a facility or a person notified by the department as potentially liable pursuant to section 12, upon written request by the director, shall take the following additional actions:

(a) Provide a plan for and undertake interim response activities.

(b) Provide a plan for and undertake evaluation activities.

(c) Take any other response activity determined by the department to be technically sound and necessary to protect the public health, safety, welfare, or the environment.

(d) Submit to the department for approval a remedial action plan that, when implemented, will achieve the cleanup levels specified in rules promulgated under this act.

(e) Implement an approved remedial action plan in accordance with a schedule approved by the department pursuant to this act.

(5) Upon a determination by the department that a person has completed all response activity at a facility pursuant to an approved remedial action plan prepared and implemented in compliance with rules promulgated under this act, the department, upon request of a person, shall execute and present a document stating that all response activities required in the approved remedial action plan have been completed.

(6) A person in charge of a facility from which a hazardous substance is released that is determined to be reportable under subsection (1)(c), other than a permitted release, that fails to notify the department within 24 hours after obtaining knowledge of the release or that submits in such notification any information that the person knows to be false or misleading is subject to a civil fine of not more than \$25,000.00 for each day in which the violation occurs or the failure to comply continues. A fine imposed under this subsection shall be based upon the seriousness of the violation and any good faith efforts by the violator to comply with this subsection.

(7) If a state or local unit of government obtains information that there is a release or threat of release on public property, and is requested by the department to undertake response activity, or takes emergency action that has been approved by the department, and the state or local unit of government incurs expenses in taking the actions, the expenses of the state or local unit of government shall be reimbursed from the Michigan environmental assurance fund if enabling legislation creating the fund is enacted into law and if each of the following is established:

(a) The release or threat of release was not discovered or should not have been discovered pursuant to section 12a(2)(b)(ii).

(b) The state or local unit of government did not cause or contribute to the release or threat of release.

(c) The state or local unit of government is not liable under section 12 for the release or threat of release.

(8) This section shall not do either of the following:

(a) Limit the authority of the department to take or conduct response activities pursuant to this act.

(b) Limit the liability of a person that may be liable under section 12.

History: Add. 1990, Act 233, Eff. July 1, 1991.

Administrative Rules: R 299.5101 et seq. of the Michigan Administrative Code.

299.610b Notifying department of agriculture; information; definition.

Sec. 10b. (1) The department, upon confirmation of a release or threat of release of a substance that is regulated by the department of agriculture, shall notify the department of agriculture. The department shall consult with the department of agriculture in the development of response activities if a release or threat of a release of a substance regulated by the department of agriculture occurs. The department of agriculture shall provide to the department information necessary to identify substances regulated by the department of agriculture. This information shall include but is not limited to the list of state registered pesticides.

(2) As used in this section, "substance regulated by the department of agriculture" means a fertilizer or soil conditioner as defined in the fertilizer act of 1975, Act No. 198 of the Public Acts of 1975, being sections 286.751 to 286.767 of the Michigan Compiled Laws, or a pesticide as defined in the pesticide control act, Act No. 171 of the Public Acts of 1976, being sections 286.551 to 286.581 of the Michigan Compiled Laws.

History: Add. 1990, Act 233, Eff. July 1, 1991.

299.610c Transfer of interest in real property; notice; certification.

Sec. 10c. (1) A person that has knowledge or information or is on notice through a recorded instrument that a parcel of his or her real property is a facility at which there has been a release, in a quantity required to be reported pursuant to section 10a(1)(c), shall not transfer an interest in that real property unless he or she provides written notice to the purchaser or other person to whom the property is transferred that the real property is such a facility and discloses the general nature and extent of the release. The written notice provided by the transferor shall be a separate instrument and, if the instrument conveying the interest in real property is recorded, the written notice shall be recorded with the register of deeds in the same county.

(2) The owner of real property for which a notice required in subsection (1) has been recorded may, upon completion of all response activities for the facility as approved by the department, record with the register of deeds for the appropriate county a certification that all response activity required in an approved remedial action plan has been completed.

History: Add. 1990, Act 233, Eff. July 1, 1991.

299.610d Duties of person required to furnish information; right to enter public or private property; purposes; duties of person entering public or private property; copies of sample analyses, photographs, or videotapes; completion of inspections and investigations; refusing entry or information; powers of attorney general; injunction; civil fine; availability of information to public; protection of information; administrative subpoena; witness fees and mileage; court order; contempt; "information" defined.

Sec. 10d. (1) To determine the need for response activity, or selecting or taking a response activity or otherwise enforcing this act or a rule promulgated under this act, the directors or their authorized representatives may upon reasonable notice require a person to furnish any information that the person may have relating to any of the following:

(a) The identification, nature, and quantity of materials that have been or are generated, treated, stored, handled, or disposed of at a facility or transported to a facility.

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(b) The nature or extent of a release or threatened release at or from a facility.

(2) Upon reasonable notice, a person required to furnish information pursuant to subsection (1) shall either:

(a) Grant the directors or their authorized representatives access at all reasonable times to any place, property, or location to inspect and copy the related information.

(b) Copy and furnish to the directors or their authorized representatives the related information.

(3) If there is a reasonable basis to believe that there may be a release or threat of release, the directors or their authorized representatives shall have the right to enter at all reasonable times any public or private property for any of the following purposes:

(a) Identifying a facility.

(b) Investigating the existence, origin, nature, or extent of a release or threatened release.

(c) Inspecting, testing, taking photographs or videotapes, or sampling of any of the following: soils, air, surface water, groundwater, suspected hazardous substances, or any containers or labels of suspected hazardous substances.

(d) Determining the need for or selecting any response activity.

(e) Taking or monitoring implementation of any response activity.

(4) A person who enters public or private property pursuant to subsection (3) shall present credentials; make a reasonable effort to contact the person in charge of the facility or that person's designee; describe the nature of the activities authorized under subsection (3) to be undertaken; and inform the person that is in charge of the facility that he or she is entitled to participate in the collection of split samples, and is entitled to a copy of the results of any analysis of samples and a copy of any photograph or videotape taken. The person in charge or his or her agent may accompany the directors or their authorized representatives during the activities authorized under subsection (3) that take place and may participate in the collection of any split samples on the property. The absence or unavailability of the person in charge or that person's agent shall not delay or limit the authority of the directors or their authorized representatives to enter the property or proceed with the activities authorized under subsection (3).

(5) If the directors or their authorized representatives obtain any samples, before leaving the property they shall give to the person in charge of the property from which the samples were obtained a receipt describing the sample. A copy of the results of any analysis of the samples shall upon request be furnished promptly to the person in charge. A copy of any photograph or videotape taken pursuant to subsection (3)(c) shall upon request be furnished promptly to the person in charge.

(6) All inspections and investigations undertaken by the directors or their authorized representatives under this section shall be completed with reasonable promptness.

(7) If refused entry or information under subsections (1) to (4), for the purposes of enforcing the information gathering and entry authority provided in this section, the attorney general, on behalf of the state, may do either of the following:

(a) Petition the court of appropriate jurisdiction for a warrant authorizing access to property or information pursuant to this section.

(b) Commence a civil action to compel compliance with a request for information or entry pursuant to this section, to authorize information gathering and entry provided for

in this section, and to enjoin interference with the exercise of the authority provided in this section.

(8) In a civil action brought pursuant to subsection (7), if there is a reasonable basis to believe there may be a release or a threatened release, the court shall in the case of interference or noncompliance with information requests pursuant to subsection (1), or with entry or inspection requests pursuant to subsection (3), enjoin interference with and direct compliance with the requests unless the defendant establishes that, under the circumstances of the case, the request is arbitrary and capricious, an abuse of discretion, or otherwise not in accordance with law.

(9) In a civil action brought pursuant to subsection (7), if there is a reasonable basis to believe there may be a release or a threatened release, the court may assess a civil fine not to exceed \$25,000.00 for each day of noncompliance against a person who unreasonably fails to comply with the provisions of subsection (1), (2), or (3).

(10) Information obtained by the directors or their authorized representatives as authorized under subsection (1) or (2) shall be available to the public to the extent provided by the freedom of information act, Act No. 442 of the Public Acts of 1976, being sections 15.231 to 15.246 of the Michigan Compiled Laws. A person that provides information pursuant to subsection (1) or (2), or the person in charge of a facility at which photographs or videotapes are taken pursuant to subsection (3), may designate the information that the person believes to be entitled to protection as if the information was exempt from disclosure as being either trade secrets or information of a personal nature under section 13(1)(a) or (g) of the freedom of information act, Act No. 442 of the Public Acts of 1976, being section 15.243 of the Michigan Compiled Laws, and submit that specifically designated information separately from other information required to be provided under this section.

(11) Notwithstanding subsection (10), the following information obtained by the directors or their authorized representatives as required by this section shall be available to the public:

(a) The trade name, common name, or generic class or category of the hazardous substance.

(b) The physical properties of a hazardous substance, including its boiling point, melting point, flash point, specific gravity, vapor density, solubility in water, and vapor pressure at 20 degrees Celsius.

(c) The hazards to the public health, safety, or welfare, or the environment posed by a hazardous substance, including physical hazards, such as explosion, and potential acute and chronic health hazards.

(d) The potential routes of human exposure to the hazardous substance at the facility being investigated, entered, or inspected under this section.

(e) The location of disposal of any waste stream released or threatened to be released from the facility.

(f) Monitoring data or analysis of monitoring data pertaining to disposal activities related to the facility.

(g) Hydrogeologic data.

(h) Groundwater monitoring data.

(12) To collect information for the purpose of identifying persons that may be liable under section 12 or to otherwise enforce this act or a rule promulgated under this act, the

attorney general may by administrative subpoena require the attendance and testimony of witnesses and production of papers, reports, documents, answers to questions, and other information the attorney general considers necessary. Witnesses shall be paid the same fees and mileage that are paid witnesses in the courts of this state. If a person fails or refuses to obey the administrative subpoena, the circuit court for the county of Ingham or for the county in which that person resides has jurisdiction to order that person to comply with the subpoena. A failure to obey the order of the court is punishable by the court as contempt.

(13) As used in this section, "information" includes, but is not limited to, documents, materials, records, photographs, and videotapes.

History: Add. 1990, Act 233, Eff. July 1, 1991.

Administrative Rules: R 299.5101 et seq. of the Michigan Administrative Code.

299.610e Response activity; purposes of remedial action; alternatives; preferred remedial actions; innovative cleanup technologies; notices and summary; public meeting; duties of department; publication; public inspection of administrative record; summary document; compilation and contents of administrative record; explanation of omitted comments or information.

Sec. 10e. (1) The department may take response activity or approve of response activity proposed by a person that is consistent with any rules promulgated under this act relating to the selection and implementation of response activity that the department concludes is necessary and appropriate to protect the public health, safety, welfare, or the environment.

(2) Remedial action undertaken under subsection (1) shall at a minimum accomplish all of the following:

(a) Assure the protection of the public health, safety, welfare, or the environment.

(b) Attain a degree of cleanup and control of hazardous substances that complies with all applicable or relevant and appropriate requirements, rules, criteria, limitations, and standards of state and federal environmental law.

(c) Be consistent with any cleanup standards incorporated in any rules promulgated under this act.

(3) The cost effectiveness of alternative means of complying with this section shall be considered by the department only in selecting among alternatives that meet all of the criteria of subsection (2).

(4) Remedial actions that permanently and significantly reduce the volume, toxicity, or mobility of the hazardous substances are to be preferred.

(5) The department shall encourage the use of innovative cleanup technologies. Before July 1, 1995, the department shall undertake 3 pilot projects to demonstrate innovative cleanup technologies at facilities where money from the fund is used.

(6) At a facility where state funds will be spent to plan or implement a remedial action plan or where the director determines there is a significant public interest, within 30 days after the completion of a remedial investigation for the facility, the department shall provide the county and the township, city, or village in which the facility is located a notice of the completion of the remedial investigation, a summary of the remedial investigation, and notice of an opportunity for the people in the local unit of government to meet with the department regarding the remedial investigation and any proposed

feasibility study for the facility. Upon a request for a public meeting by the governing body of the local unit of government or by 25 citizens of the local unit of government, the department shall, within 30 days of the request, meet with persons in the local unit of government. The person or persons requesting the public meeting shall publicize and provide accommodations for the meeting. The meeting shall be held in the local unit of government in which the facility is located. The department shall provide copies of the notices and summary required in this subsection to the governing body of the local unit of government, to the known persons that may be liable under section 12, and to the main public library of the local unit of government in which the facility is located. The department shall send representatives to the meeting who are familiar with the facility and who are involved with determining the appropriate remedial actions to be taken at the facility. Persons that may be responsible under section 12 for the facility may send representatives to the meeting.

(7) Before approval of a proposed remedial action plan at a facility included on the list pursuant to section 6 that is not an interim response activity, if money from the fund is to be used or as specified in rules promulgated under this act, the department shall do all of the following:

(a) Publish a notice and brief summary of the proposed remedial action plan.

(b) Provide for public review and comment pertinent to documents relating to the proposed remedial action plan, including, if applicable, the feasibility study that outlines alternative remedial action measures considered.

(c) Provide an opportunity for a public meeting at or near the facility when any of the following occur:

(i) The department determines that there is a significant public interest or that for any other reason a public meeting is appropriate.

(ii) A city, township, or village in which the facility is located, by a majority vote of its governing body, requests a public meeting.

(iii) A local health department with jurisdiction in the area in which the facility is located requests a public meeting.

(d) Provide a document that summarizes the major issues raised by the public and how they are to be addressed by the final approved remedial action plan.

(8) For purposes of this section, publication shall include, at a minimum, publication in a major local newspaper of general circulation in this state. In addition, the administrative record shall be made available by the department for inspection by members of the public at or near the facility and in Lansing.

(9) The department shall prepare a summary document that explains the reasons for the selection or approval of a remedial action plan. In addition, the department shall compile an administrative record of the decision process that results in the selection of a remedial action plan. The administrative record shall contain all of the following:

(a) Remedial investigation data regarding the facility.

(b) If applicable, a feasibility study and potential remedial actions.

(c) If applicable, a summary document that explains the reasons why a remedial investigation or feasibility study was not conducted.

(d) Applicable comments and information received from the public, if any.

(e) If applicable, a document that summarizes the significant concerns raised by the members of the public and how they are to be addressed.

(f) Other information appropriate to the facility.

(10) If comments or information are submitted for inclusion in the administrative record that are not included in the administrative record, a brief explanation of why the information was not considered relevant shall be sent to the party by the department and included in the record.

History: Add. 1990, Act 233, Eff. July 1, 1991.

Administrative Rules: R 299.5101 et seq. of the Michigan Administrative Code.

299.610f Action to abate danger or threat; administrative order; noncompliance; liability; petition for reimbursement; action in court of claims; evidence.

Sec. 10f. (1) In accordance with this section, if the department determines that there may be an imminent and substantial endangerment to the public health, safety, welfare, or the environment, because of a release or threatened release, the department may require persons that may be liable under section 12 to take such action as may be necessary to abate the danger or threat.

(2) The department may issue an administrative order to a person identified by the department as a person that may be liable under section 12 requiring that person to perform response activity relating to a facility for which that person may be liable, or to take any other action required by this act. An order issued under this section shall state with reasonable specificity the basis for issuance of the order and specify a reasonable time for compliance.

(3) Within 30 days after issuance of an administrative order under this section, a person to whom the order was issued shall indicate in writing whether the person intends to comply with the order.

(4) A person that, without sufficient cause, violates or fails to properly comply with an administrative order issued under this section shall be liable for either or both of the following:

(a) A civil fine of not more than \$25,000.00 for each day in which the violation occurs or the failure to comply continues. A fine imposed under this subsection shall be based upon the seriousness of the violation and any good faith efforts by the violator to comply with the administrative order.

(b) For exemplary damages in an amount at least equal to the amount of any costs of response activity incurred by the state as a result of a failure to comply with an administrative order but not more than 3 times the amount of these costs.

(5) A person to whom an administrative order was issued under this section and who complied with the terms of the order who believes that the order was arbitrary and capricious or unlawful may petition the department, within 60 days after completion of the required action, for reimbursement from the fund for the reasonable costs of the action plus interest at the rate described in section 12(4) and other necessary costs incurred in seeking reimbursement under this subsection. If the department refuses to grant all or part of the petition, the petitioner may, within 30 days of receipt of the refusal, file an action against the department in the court of claims seeking this relief. A failure by the department either to grant or deny all or any part of a petition within 120 days of receipt shall constitute a denial of that part of the petition which shall be reviewable as final agency action in the court of claims. To obtain reimbursement, the petitioner shall establish by a preponderance of the evidence that the petitioner is not liable under section

12 or that the action ordered was arbitrary and capricious or unlawful, and in either instance that costs for which the petitioner seeks reimbursement are reasonable in light of the action required by and undertaken pursuant to the relevant order.

History: Add. 1990, Act 233, Eff. July 1, 1991.

299.611 Repealed. 1990, Act 234, Eff. July 1, 1991.

Compiler's note: The repealed section pertained to reimbursement for replacement of contaminated potable water supply.

299.611a Schedule; remedial action plan; notice; action by department.

Sec. 11a. (1) The department shall develop a proposed schedule for submittal of work plans for undertaking necessary response activity for sites identified on a list prepared pursuant to section 6. Each work plan submitted shall include a schedule for submittal of a proposed remedial action plan for the site. The proposed schedule shall be consistent with any schedule required under the leaking underground storage tank act, Act No. 478 of the Public Acts of 1988, being sections 299.831 to 299.850 of the Michigan Compiled Laws. The proposed schedule shall be reviewed by the commission of natural resources, and after a public hearing regarding the proposed schedule, the commission of natural resources shall establish a schedule. The department shall give written notice of the schedule to all identified persons that may be liable under section 12 and shall publish the schedule in the Michigan register listing each facility by township and range coordinates, address, and, if available, common identity. The department may grant an extension to a requirement in the schedule only after holding a public hearing in the county in which the facility subject to the schedule is located.

(2) The persons that may be liable under section 12 for a facility may submit a proposed remedial action plan to the department at any time in advance of the date provided in the schedule under subsection (1).

(3) A proposed remedial action plan submitted to the department under this act shall include a schedule for implementation of response activity at the facility. Within 6 months after receiving a proposed remedial action plan under this act, the department shall review the plan and shall either approve the plan or submit to the persons that may be liable under section 12 changes in the proposed remedial action plan that would result in approval of the plan. If the department submits changes to the proposed remedial action plan, within 60 days after the persons that may be liable under section 12 receive the department's changes, the persons that may be liable under section 12 may incorporate these changes into their proposed remedial action plan and resubmit the proposed remedial action plan to the department. Upon receipt of a proposed remedial action plan that meets the requirements of the department, the department shall approve the remedial action plan.

(4) If the department approves a remedial action plan under subsection (3), the persons that may be liable under section 12 shall implement the approved remedial action plan.

(5) If the participating persons that may be liable under section 12 reject the department's changes to the proposed remedial action plan under subsection (3), the persons that may be liable under section 12 shall notify the department within 60 days after receiving the department's changes. Within 60 days after the persons that may be liable under section 12 reject the department's changes, the department and the persons that may be liable under section 12 shall attempt to resolve their differences, or identify items of difference between them for submittal to the science advisory council pursuant

to section 11c. If the department and the persons that may be liable under section 12 are unable to jointly agree to the items of difference, the department shall notify the office of environmental cleanup facilitation and the list of items of difference shall be prepared as provided in section 11b(2).

(6) The department shall publish a notice in the Michigan register each quarter identifying those sites not in compliance with the schedule for submittal of response activity work plans and those sites in which the department has not acted on a proposed remedial action plan, as provided in this section.

ent. (7) This section does not preclude the department from taking action as provided in sections 10e and 10f.

History: Add. 1990, Act 234, Eff. July 1, 1991.

299.611b Office of environmental cleanup facilitation; creation; duties; assignment and duties of facilitator; sharing costs of facilitator.

Sec. 11b. (1) The office of environmental cleanup facilitation is created within the department of management and budget. The office of environmental cleanup facilitation shall contract with individuals who are impartial, qualified facilitators or contract with an organization that can provide impartial, qualified facilitators, who are capable of assisting in the resolution of disputes over the development of remedial action plans.

(2) Within 14 days after receiving notification of submittal to facilitation from the department under section 11a, the office of environmental cleanup facilitation shall randomly assign a facilitator to prepare a detailed list of items of difference between the department and the persons that may be liable under section 12. The facilitator assigned to the dispute shall conduct discussions to identify those items of difference and, within 30 days after being assigned, shall prepare the items of difference and shall forward this list to the science advisory council.

(3) Unless otherwise agreed by the department and the persons that may be liable under section 12 and except as provided in section 11c(3), the department and the persons that may be liable under section 12 shall each pay their costs associated with facilitation under this section and section 11c and they shall share equally the costs of the facilitator.

History: Add. 1990, Act 234, Eff. July 1, 1991.

299.611c Recommendations for resolving items of difference; written statements; meeting; recommendations as part of administrative record; additional discussions; facilitation conference; facilitating agreement; remedial action plan; alternative plan; implementation; standing of participants in allocation process in civil action to challenge recommendations; assessing costs of facilitation; attorney fees; recovering costs of response activities; cost of remedial action; rebuttable presumption; action by department.

Sec. 11c. (1) Upon receipt of the items of difference pursuant to section 11a or 11b, the science advisory council shall appoint 3 of its members to provide recommendations for resolving the items of difference. Within 60 days of its receipt of the items of difference, for each item of difference, the department and the persons that may be liable under section 12 may submit a written statement not exceeding 20 pages in support of its position. An interested member of the general public may also submit a written statement, not exceeding 20 pages, in support of a position on any item of difference. The

science advisory council shall schedule a meeting to deliberate and prepare recommendations on resolving the items of difference. A meeting of the science advisory council shall be held pursuant to the open meetings act, Act No. 267 of the Public Acts of 1976, being sections 15.261 to 15.275 of the Michigan Compiled Laws. The science advisory council shall, within 90 days of receiving the written statements allowed to be submitted in this subsection, forward its recommendations on the items of difference to the department, the persons that may be liable under section 12, and the facilitator. The recommendations of the science advisory council shall become part of the administrative record.

(2) Within 30 days after receipt of the recommendations of the science advisory council pursuant to subsection (1), the facilitator shall conduct additional discussions with the department and the persons that may be liable under section 12 and shall schedule a facilitation conference. Through these discussions, the facilitator shall attempt to facilitate an agreement between the department and the persons that may be liable under section 12 regarding the contents of a remedial action plan. If the department and the persons that may be liable under section 12 are unable to agree to a remedial action plan at the facilitation conference, the department shall approve a remedial action plan that includes the recommendations of the science advisory council, unless the department prepares and approves an alternative remedial action plan. The department shall approve a remedial action plan pursuant to this subsection within 90 days after the department receives the recommendations from the science advisory council. If the department does not approve a remedial action plan during this time period, the persons that may be liable under section 12 may implement a remedial action plan that includes all of the recommendations of the science advisory council and is otherwise in compliance with this act and the rules promulgated under this act. This remedial action plan shall be considered an approved remedial action plan.

(3) A person that participates in the allocation process under section 11f or 11g shall not have standing in a civil action to challenge the recommendations of the science advisory council, pursuant to subsection (1), which are included in an approved remedial action plan. Additionally, if a court later upholds the contents of the approved remedial action plan, the court shall assess against the persons that may be liable under section 12 for the facility the full costs of facilitation under this section and section 11b and enforcement costs. If the department approves a remedial action plan that does not contain the recommendations endorsed by a majority of the science advisory council and if a court later does not uphold the contents of that remedial action plan, the court shall assess against the department the full costs of facilitation under this section and section 11b, court costs, and the reasonable attorney fees for the persons that may be liable under section 12. Additionally, if the action is for cost recovery of response activities at a facility in which remedial action has been completed, the court shall only assess against the persons that may be liable under section 12 the cost of remedial action that the court determines should have been undertaken.

(4) In any court proceeding pursuant to this section, there is a rebuttable presumption that the recommendations of the science advisory council on the items of difference are supported by a preponderance of scientific evidence.

(5) This section does not preclude the department from taking action as provided in sections 10e and 10f.

History: Add. 1990, Act 234, Eff. July 1, 1991.

Administrative Rules: R 299.5101 et seq. of the Michigan Administrative Code.

299.611d Science advisory council; creation; appointment, qualifications, and terms of members; removal of member; restriction on employment; recommendations; information.

Sec. 11d. (1) The science advisory council is created as an independent, autonomous entity within the department of management and budget. The council shall consist of 7 individuals appointed by the governor, with the advice and consent of the senate, who have expertise in 1 or more of the following areas:

- (a) Toxicology.
- (b) Environmental engineering.
- (c) Biology.
- (d) Environmental chemistry.
- (e) Hydrogeology.
- (f) Soil science.
- (g) Statistics.

(2) A member of the science advisory council shall serve for a term of 3 years, or until a successor is appointed by the governor, whichever is later, except of the members first appointed, 3 shall serve for 3 years, 2 shall serve for 2 years, and 2 shall serve for 1 year.

(3) The governor may remove a member of the science advisory council for incompetency, dereliction of duty, malfeasance in office, or any other good cause.

(4) For a period of 6 months after an individual ceases to serve on the science advisory council, that individual shall not be employed by the department, a person that may be liable under section 12, or a consulting firm associated with the department or a person that may be liable under section 12.

(5) Three members of the science advisory council shall on a rotating basis make recommendations on resolving the items of difference between the department and the persons that may be liable under section 12 for a facility with regard to the contents of a remedial action plan pursuant to this act. The science advisory council need not recommend a position advocated by either the department or the persons that may be liable under section 12, but may recommend an alternative that is supported by scientific evidence and is consistent with this act and the rules promulgated under this act.

(6) The science advisory council shall make recommendations only on the scientific and technical issues in dispute consistent with the rules promulgated under this act, including, but not limited to:

- (a) Risk assessment assumptions and calculations.
- (b) Data collection and interpretation.
- (c) Technological effectiveness of remedial action alternatives.
- (d) Chemical, biological, and physical properties.
- (e) Impacts on various media.

(7) The science advisory council shall not make recommendations on issues that are not primarily scientific or technical in nature including, but not limited to, any of the following:

- (a) Cost effectiveness of remedial action alternatives.
- (b) Current and reasonably foreseeable uses of natural resources.
- (c) Reasonably foreseeable uses of the facility.

(8) The members of the science advisory council who make recommendations regarding the contents of a remedial action plan for a facility shall not have any present or past personal, contractual, financial, business, or employment interest in matters related to the persons that have disputes before the science advisory council.

(9) Upon request of the science advisory council, the department shall provide the science advisory council with all information the department has in its possession related to a facility.

History: Add. 1990, Act 234, Eff. July 1, 1991.

Administrative Rules: R 299.5101 et seq. of the Michigan Administrative Code.

299.611e Report to legislature.

Sec. 11e. Within 3 years after the effective date of this section, the department shall report to the legislature on all of the following with regard to the dispute resolution process under sections 11a to 11d:

- (a) Whether the dispute resolution process is effectively resolving disputes.
- (b) The number of disputes addressed by the dispute resolution process.
- (c) The results of disputes subject to the dispute resolution process.
- (d) Recommendations regarding legislative action to improve the dispute resolution process.
- (e) The cost of the resolution of disputes through the use of the dispute resolution process.

History: Add. 1990, Act 234, Eff. July 1, 1991.

299.611g Definitions; applicability of section; approval of remedial action plan; notice; list; commencement of allocation process; participation; schedule; plan; negotiations; agreement; copy; consent order; allocation review panel; information; determination; acceptance or rejection; funding uncollectible percentage; construction of section; evidence; jurisdiction; limitation; administrative order; action for reimbursement; costs; moratorium; authority not limited; recovery of costs; loans to small businesses; rules; creation and responsibility of orphan share administration; staff and services.

Sec. 11g. (1) As used in this section:

(a) "Allocation process" means a voluntary system for determining the percentage share of response costs pursuant to this section of each person that may be liable under section 12 and the orphan share, if any.

(b) "Allocation review panel" or "panel" means the allocation review panel appointed by the orphan share administration.

(c) "Orphan share" means the percentage share of response costs for a facility that the orphan share administration agrees or the allocation review panel determines is not reasonably allocable to any person that may be liable under section 12 using the criteria in subsection (10).

(d) "Orphan share administration" means the orphan share administration created in subsection (21).

(e) "Response costs" means all costs incurred in taking or conducting a response activity, enforcement costs, and all costs incurred by the orphan share administration for the services of the allocation review panel.

(2) This section only applies to a facility where 2 or more persons that may be liable under section 12 are identified by the department. However, if only 1 person that may be liable under section 12 is identified for a facility by the department, that person may submit a written request within 14 days after the department approves a remedial action plan, or a remedial action plan is considered approved under section 11c to the orphan share administration to commence the allocation process. A facility for which only 1 person that may be liable under section 12 is identified shall be considered by the allocation review panel as provided in this section in a manner and at a time that will not impede the allocation process for other facilities.

(3) After the department approves a remedial action plan, or a remedial action plan is considered approved under section 11c, for a facility pursuant to this act and any rules promulgated under this act, the department shall notify in writing each identified person that may be liable under section 12 for a facility and the orphan share administration of the approval of the remedial action plan for the facility. The department shall also send the orphan share administration a list of the names and addresses of all identified persons that may be liable under section 12, and if requested by the orphan share administration, the department shall at any time provide the orphan share administration with all information in the possession of the department that is related to the release. Upon the request of the orphan share administration, the allocation process may commence prior to the approval of the remedial action plan. A person that may be liable under section 12 may petition the orphan share administration to commence the allocation process prior to the approval of the remedial action plan or the remedial action plan is considered approved under section 11c.

(4) Not later than 7 days after receipt of the notice of approval of a remedial action plan for the facility, the orphan share administration shall notify each of the persons that may be liable under section 12 in writing of the opportunity to participate in an allocation process. A person that may be liable under section 12 that intends to participate in the allocation process shall notify the orphan share administration in writing within 14 days of receiving notice from the orphan share administration.

(5) If, within the 14-day period during which a person that may be liable under section 12 may indicate their intention to participate in the allocation process, 1 or more of the persons that may be liable under section 12 identified in regard to a facility notify the orphan share administration that the person intends to participate in the allocation process, the orphan share administration shall develop a schedule and plan to facilitate negotiations to determine the percentage share of response costs of each person that may be liable under section 12 and any orphan share. The negotiations shall be completed within 21 days after the last day on which persons that may be liable under section 12 may notify the orphan share administration of the intent to participate, unless all of the participants agree to extend the negotiations. An extension of the negotiations shall not result in an extension of the time limitations provided in subsections (8) and (10).

(6) If, during the negotiation period provided in subsection (5), all of the persons that may be liable under section 12 participating in the allocation process and the orphan share administration agree in writing to a complete percentage allocation of response costs related to the facility, the orphan share administration shall, within 3 days of

reaching the agreement, send a copy of the agreement to the director and the attorney general.

(7) The attorney general on behalf of the state may enter into a legally enforceable consent order with 1 or more of the participants in the allocation process providing for implementation of the remedial action plan, payment of response costs, and resolution of other potential liability under this act, including liability for damages and civil fines.

(8) If, within the negotiation period provided in subsection (5), all of the persons that may be liable under section 12 for a facility and the orphan share administration do not agree in writing to a complete percentage allocation of response costs related to the facility, the orphan share administration shall convene an allocation review panel to determine an allocation of the percentage share of response costs of each person that may be liable under section 12 including the orphan share, if any. Regardless of when the allocation process commences, the allocation review panel shall be convened no later than 50 days after notification of the persons that may be liable under section 12 of the approval of the remedial action plan for a facility. The allocation review panel shall consist of 3 members selected by the orphan share administration. In selecting the members for an allocation review panel, the orphan share administration shall determine that a member selected for a panel does not have a personal or financial interest in the outcome of the allocation process.

(9) According to the procedures established by the orphan share administration, each of the participating persons that may be liable under section 12 and the orphan share administration may submit to the panel documentation and other information as considered relevant by a person that may be liable under section 12 or the orphan share administration. In addition, the director may submit to the panel information related to the facility or allocation process that the director considers relevant.

(10) Not later than 90 days after notification of the persons that may be liable under section 12 of approval of the remedial action plan for a facility, the allocation review panel shall issue a written determination allocating the percentage share of response costs of each person that may be liable under section 12 and the orphan share, if any. In reaching a determination, the allocation review panel shall do all of the following:

(a) Consider each of the following as these items relate to each person that may be liable under section 12 and the orphan share, if any:

(i) The volume of hazardous substances transported to the facility. For purposes of determining volume, a shipment of a hazardous substance shall be counted 1 time when allocating a percentage share of response costs between a generator and a transporter of a hazardous substance.

(ii) The anticipated impact of the hazardous substance on the cost of response activity at the facility.

(iii) The degree of care exercised in the disposal or treatment, or both of the hazardous substance by each person that may be liable under section 12.

(iv) The manner in which the facility was operated and the degree of care exercised by the owner or operator.

(v) The degree of involvement in facility operations.

(vi) Whether all applicable permits and licenses required by law were obtained and complied with.

(vii) The degree of cooperation by the person with federal, state, or local officials to prevent, minimize, respond to, or remedy the release or threat of release.

(viii) Any other aggravating or mitigating factor that the allocation review panel determines to be relevant.

(b) Consider the quality of documentation and other information submitted.

(c) If information gaps exist, make reasonable extrapolations from the available information as considered advisable by the allocation review panel.

(11) A copy of the written determination of the allocation review panel shall be forwarded by the panel to the director, the attorney general, and to each of the participants in the allocation process. Within 10 days of receipt of the determination of the allocation review panel, each participant shall notify the orphan share administration of the participant's acceptance or rejection of the panel's determination. The orphan share administration shall notify the allocation review panel, the director, and the attorney general of the participants' decision.

(12) Upon completion of the allocation process under this section, the percentage allocated to the orphan share and the portion allocated to a person that is uncollectible for a facility, if any, shall be funded in full by the other persons that may be liable under section 12 for that facility in proportion to the percentage that each person was assigned pursuant to the allocation process.

(13) The attorney general on behalf of the state may enter into a legally enforceable consent order with 1 or more of the participants in the allocation process who are in agreement with the determination of the allocation review panel providing for implementation of the remedial action plan, payment of response costs, and resolution of other potential liability under this act, including liability for damages and civil fines.

(14) This section shall not be construed to limit the authority of the department or the attorney general at any time to enter into an agreement in the public interest to resolve in whole or in part the liability of a person under this act.

(15) Any allocation of percentage shares of response costs under this section shall not be admissible as evidence in any proceeding, except to prove, if disputed, the financial obligations under the terms of an allocation agreement pursuant to subsection (6) or (11) of a person who has limited its liability under subsection (16). A court shall not have jurisdiction to review an allocation or the procedures used to determine an allocation. The allocation of percentage share of response costs or the procedures used to determine an allocation shall not constitute an apportionment or other statement on the divisibility of harm or causation.

(16) The liability under this act of a person that may be liable under section 12, that accepts and pays its allocated share of response activity costs as determined through a voluntary allocation agreement pursuant to subsection (6) or by the allocation review panel pursuant to subsection (10), and who by consent order or administrative order pays its portion of the orphan share and the uncollectible portion pursuant to subsection (12) which results in implementation of an approved remedial action plan shall with respect to matters covered by the order be limited to that person's allocated share of response costs. The department may issue an administrative order pursuant to section 10f to require a person that may be liable under section 12 to implement the plan approved by the department. To be enforceable, the order described in this subsection shall not require that the department determine that there may be an imminent and substantial endangerment to the public health, safety, or welfare, or the environment prior to issuance of the order. In

an action for reimbursement pursuant to section 10f(5), if the court upholds the order, the court shall assess against the petitioner the full costs of defending this proceeding, including attorney fees.

(17) If a person that may be liable under section 12 participates in the allocation process set forth in this subsection, the director and the attorney general shall not commence an action under section 10f or 16 against the participating person for a period of 120 days after the persons that may be liable under section 12 have been notified of the approval of a remedial action plan. If the director and the attorney general determine that the parties are bargaining in good faith and that an extension of this moratorium would facilitate an agreement with the persons that may be liable under section 12 for taking response activity, they may extend the moratorium for an additional period of up to 30 days.

(18) Notwithstanding subsection (17), this section shall not limit the department's authority to undertake response activity at any time or the attorney general's authority to undertake enforcement action against any person that may be liable under section 12 that does not participate in the allocation process.

(19) The attorney general may file an action under section 16 to recover all costs incurred by the orphan share administration from persons that refuse to participate in the allocation process or in the remedial action on the basis of their allocated share.

(20) The orphan share administration shall promulgate rules establishing a loan program to provide loans to small businesses that may be liable under section 12. A loan shall be provided to assist a small business in fulfilling any of its responsibilities in undertaking a response activity in compliance with this act and the rules promulgated under this act, except if the small business is convicted of violating section 16b. A loan shall not be made under this section until rules are promulgated establishing the loan program described in this subsection. To be eligible for a loan under this section, a small business shall submit to the orphan share administration evidence that is satisfactory to the orphan share administration that the small business has taken or is taking action necessary to prevent future releases and to otherwise comply with this act and applicable state and federal environmental law. As used in this subsection, small business means a business concern incorporated or doing business in this state that has a net worth of less than \$10,000,000.00, including the affiliates of the business concern that are independently owned and operated.

(21) The orphan share administration is created within the department of management and budget. The orphan share administration shall administer the allocation process as provided in this section. The department of management and budget shall provide the orphan share administration with sufficient staff and services to allow it to carry out its responsibilities under this section.

History: Add. 1990, Act 233, Iff. July 1, 1991.

Administrative Rules: R 299.5101 et seq. of the Michigan Administrative Code.

299.612 Liability for response activity costs; amounts recoverable; permitted release; obligations or liability under other state law; action to abate danger or threat; jurisdiction; evidence.

Sec. 12. (1) Notwithstanding any other provision or rule of law and subject only to the defenses set forth in sections 12a and 12b, if there is a release or threatened release from a facility that causes the incurrence of response activity costs, the following persons shall be liable under this section:

(a) The owner or operator of the facility.

(b) The owner or operator of the facility at the time of disposal of a hazardous substance.

(c) The owner or operator of the facility since the time of disposal of a hazardous substance not included in subdivision (a) or (b).

(d) A person that by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of a hazardous substance owned or possessed by the person, by any other person, at the facility owned or operated by another person and containing the hazardous substance.

(e) A person that accepts or accepted any hazardous substance for transport to the facility selected by that person.

(2) A person described in subsection (1) shall be liable for all of the following:

(a) All costs of response activity lawfully incurred by the state relating to the selection and implementation of response activity under this act.

(b) Any other necessary costs of response activity incurred by any other person consistent with rules relating to the selection and implementation of response activity promulgated under this act.

(c) Damages for the full value of injury to, destruction of, or loss of natural resources, including the reasonable costs of assessing the injury, destruction, or loss resulting from the release.

(3) The costs of response activity recoverable under subsection (2) shall also include:

(a) All costs of response activity reasonably incurred by the state prior to the promulgation of rules relating to the selection and implementation of response activity under this act, excepting those cases where cost recovery actions have been filed before July 11, 1990. A person challenging the recovery of costs under this subdivision shall have the burden of establishing that the costs were not reasonably incurred under the circumstances that existed at the time the costs were incurred. Recoverable costs include costs incurred reasonably consistent with the rules relating to the selection and implementation of response activity in effect on July 11, 1990.

(b) Any other necessary costs of response activity reasonably incurred by any other person prior to the promulgation of rules relating to the selection and implementation of response activity under this act. A person seeking recovery of these costs has the burden of establishing that the costs were reasonably incurred under the circumstances that existed at the time the costs were incurred.

(4) The amounts recoverable in an action under this section shall include interest on the amounts recoverable under subsections (2) and (3). This interest shall accrue from the date payment is demanded in writing, or the date of the expenditure or damage, whichever is later. The rate of interest on the outstanding unpaid balance of the amounts recoverable under this section shall be the same rate as is specified in section 6013(5) of the revised judicature act of 1961, Act No. 236 of the Public Acts of 1961, being section 600.6013 of the Michigan Compiled Laws.

(5) A person shall not be required under this act to undertake response activity for a permitted release. Recovery by any person for response activity costs or damages resulting from a permitted release shall be pursuant to other applicable law, in lieu of this act. This subsection shall not affect or modify in any way the obligations or liability of any person under any other state law, including common law, for damages, injury, or loss

resulting from a release of a hazardous substance or for response activity or the costs of response activity.

(6) If the director determines that there may be an imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release from a facility, the attorney general may bring an action against any person described in subsection (1) or any other appropriate person to secure the relief that may be necessary to abate the danger or threat. The court has jurisdiction to grant such relief as the public interest and the equities of the case may require.

(7) In establishing liability under this section, the department shall bear the burden of proof. If the department proves a prima facie case against a person, the person shall bear the burden of showing by a preponderance of the evidence that they are not liable under this section.

History: Add. 1990, Act 233, Eff. July 1, 1991.

Administrative Rules: R 299.5101 et seq. of the Michigan Administrative Code.

299.612a Evidence establishing nonliability under § 299.612; "contractual relationship" defined; additional evidence required; effort to minimize liability; liability of previous owner or operator not diminished; liability of state or local unit of government; liability of commercial lending institution; disposal of property by commercial lending institution; assuming ownership or control of property as fiduciary; applicability of defenses to liability; "foreclosure environmental assessment" defined.

Sec. 12a. (1) A person shall not be liable under section 12 if that person establishes by a preponderance of the evidence that the release or threat of release was caused solely by:

(a) An act of God.

(b) An act of war.

(c) An act or omission of a third party other than an employee or agent of the person that may be liable under section 12, or other than one whose act or omission occurs in connection with a contractual relationship, existing directly or indirectly, with the person that may be liable under section 12 if the person that may be liable under section 12 establishes by a preponderance of the evidence both of the following:

(i) That he or she exercised due care with respect to the hazardous substance, taking into consideration the characteristics of the hazardous substance, in light of all relevant facts and circumstances.

(ii) That he or she took reasonable precautions against reasonably foreseeable acts or omissions of a third party and the consequences that foreseeably could result from those acts or omissions.

(d) Any combination of subdivision (a), (b), or (c).

(2) The term contractual relationship, as used in subsection (1)(c), includes, but is not limited to, land contracts, deeds, or other instruments transferring title or possession, unless both of the following are established:

(a) The real property on which the facility is located was acquired by the person that may be liable under section 12 after the disposal or placement of the hazardous substance on, in, or at the property.

(b) The person that may be liable under section 12 by a preponderance of the evidence proves 1 or more of the following:

(i) At the time the person that may be liable under section 12 acquired the property, that person did not know and had no reason to know that a hazardous substance that is the subject of the release or threat of a release was disposed of on, in, or at the facility.

(ii) The person that may be liable under section 12 is a state or local unit of government that acquired the property by purchase, gift, transfer, dedication, or condemnation, and, for property acquired after the effective date of this section, the state or local unit of government does all of the following:

(A) Conducts or causes to be conducted a visual inspection of the property and a review of the ownership and use history of the property to determine whether a probability exists that the property is a facility. If the visual inspection or the ownership and use history, or both, show that there may be a release or threat of release, the state or local unit of government shall conduct, or cause to be conducted, an environmental assessment of the property that includes an on-site evaluation of the nature and extent, if any, of the release or threat of release, and an inspection of all permanent structures on the property for the presence of a hazardous substance.

(B) Prior to final acquisition, if the environmental assessment required in subparagraph (ii)(A) discloses a release or threat of release, the state or local unit of government shall do all of the following:

(I) Provide a report of the findings and conclusions of the environmental assessment to the governing body of the unit of government.

(II) Provide a public notice of the availability of the report of the findings and conclusions of the environmental assessment.

(III) Submit the report and the environmental assessment to the department.

(C) After final acquisition, if the environmental assessment required in subparagraph (ii)(A) disclosed a release or threat of release, the state or local unit of government shall provide the department with a right of entry to the property at all reasonable times for any of the purposes listed in section 10d(3)(a) through (e).

(D) After final acquisition, unless waived by the director through the exercise of his or her discretion, if the environmental assessment required in subparagraph (ii)(A) disclosed a release or threat of release, the state or local unit of government shall not transfer any legal interest, or any equitable or possessory interest that relinquishes control over that property for more than 45 days, unless the state or local unit of government does all of the following:

(I) Provide any transferee with a copy of the environmental assessment required in subparagraph (ii)(A) prior to the transfer of the property.

(II) Include in any contract for transfer of the property a statement that, absent a covenant not to sue from the state as provided by section 14a, the transferee will be a person that may be liable under section 12 of this act.

(III) Include as a condition to the transfer in any contract for the transfer of the property that the transferee agrees to provide the department with a right of entry to the property at all reasonable times for any of the purposes listed in section 10d(3)(a) through (e) related to a release or threat of release disclosed in the environmental assessment required in subparagraph (ii)(A).

(IV) Provide the department with a copy of the contract for transfer of the property and a description of the intended use of the property by the transferee within 14 days of the execution of the transfer.

(iii) The person that may be liable under section 12 acquired the property by inheritance.

(3) In addition to establishing 1 or more of the circumstances described in subsection (2)(b)(i), (ii), or (iii), the person that may be liable under section 12 shall establish that he or she has satisfied the requirements of subsection (1)(c)(i) and (ii).

(4) To establish that the person that may be liable under section 12 had no reason to know, as required under subsection (2)(b)(i), the person that may be liable under section 12 shall have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice in an effort to minimize liability. For purposes of the preceding sentence, the court shall take into account any specialized knowledge or experience on the part of the person that may be liable under section 12, the relationship of the purchase price to the value of the property if uncontaminated by a hazardous substance, commonly known or reasonably ascertainable information about the property, the obviousness of the presence or likely presence of a release or threat of release at the property, and the ability to detect a release or threat of release by appropriate inspection.

(5) This section shall not diminish the liability of a previous owner or operator of a facility that would otherwise be liable under this act. Notwithstanding this section, if the person that may be liable under section 12 obtained actual knowledge of the release or threat of release at the facility when that person owned the real property and then transferred ownership of the property to another person without disclosing this knowledge, the person shall be liable under section 12 and a defense under this section shall not be available to that person. Nothing in this section shall affect the liability under this act of a person that may be liable under section 12 that, by an act or omission, caused or contributed to the release or threat of release that is the subject of a response activity at the facility.

(6) The state or a local unit of government shall not be liable under this act for costs or damages as a result of response activity taken in response to a release or threat of release. This subsection shall not preclude liability for costs or damages as a result of gross negligence, including reckless, willful, or wanton misconduct, or intentional misconduct by the state or local unit of government.

(7) A commercial lending institution that has not participated in the management of a facility prior to taking title acquires a property that is a facility through foreclosure or through acceptance of a deed in lieu of foreclosure for the sole purpose of realizing on a security interest shall not be liable under this act, if 1 or more of the following are true:

(a) The property is a residential property.

(b) The property is an agricultural property.

(c) The commercial lending institution acquired ownership or control of the property involuntarily through a court order or other involuntary circumstance.

(d) The commercial lending institution would otherwise be liable solely under section 12(1)(c) and the commercial lending institution acquired ownership or control of the property prior to August 1, 1990.

(8) If a commercial lending institution that has not participated in the management of a facility prior to taking title, other than those properties described in subsection (7)(a) or (b), conducts, within 180 days before or after taking title to the property, a valid foreclosure environmental assessment prior to disposition of that property, and that foreclosure environmental assessment does not indicate that there was a release or threat

of release on the property, there is a rebuttable presumption that the commercial lending institution has satisfied the criteria specified in subsection (1)(c) with respect to that property. The defense to liability in this subsection does not apply to a release that started after the date on which the commercial lending institution acquired title to the property and during the time the commercial lending institution held title to the property.

(9) If a commercial lending institution that prior to taking title of a property through foreclosure or through acceptance of a deed in lieu of foreclosure has not participated in the management of property, other than a property described in subsection (7)(a) or (b), performs a foreclosure environmental assessment on the property within 180 days before or after taking title to the property, and that foreclosure environmental assessment indicates that there is a release or threat of release on that property, the commercial lending institution shall not dispose of that property unless the commercial lending institution provides the department with a complete copy of the results of the foreclosure environmental assessment, and the commercial lending institution enters into an agreement with the department regarding disposition of the property. If a commercial lending institution submits a proposal to the department regarding disposition of the property, the department shall, within 6 months, review the proposal and either approve the proposal or submit changes to the commercial lending institution that would result in approval of the proposal. However, if the commercial lending institution and the department are unable to reach an agreement pertaining to disposition of the property, the commercial lending institution shall not transfer the property, other than to the state. A commercial lending institution that establishes that it has met the requirements of this subsection shall not be liable under section 12 with respect to that property.

(10) A commercial lending institution or other person that has not participated in the management of a property prior to assuming ownership or control of the property as a fiduciary, as defined by section 5 of the revised probate code, Act No. 642 of the Public Acts of 1978, being section 700.5 of the Michigan Compiled Laws, and that is acting or has acted in a capacity permitted by the revised probate code, Act No. 642 of the Public Acts of 1978, being sections 700.1 to 700.993 of the Michigan Compiled Laws, shall not be personally liable as an owner or operator of the property under this act. This subsection shall not do either of the following:

(a) Relieve the fiduciary from personal liability as the result of the fiduciary's assumption of personal liability, or negligence, gross negligence, or reckless, willful, or intentional misconduct.

(b) Prevent claims against the assets that are part of or all of the estate or trust that contains the facility; any other estate or trust of the decedent, grantor, ward, or other person whose estate or trust contains the facility that is administered by the commercial lending institution or other person; or any other estate or trust of the decedent, grantor, ward, or other person whose estate or trust contains the facility. Such claims may be asserted against the fiduciary in its representative capacity, whether or not the fiduciary is personally liable.

(11) A commercial lending institution that has not participated in the management of a property prior to assuming ownership or control of the property in a fiduciary capacity, and pursuant to a fiduciary agreement entered into on or before August 1, 1990 owns or controls the property in a fiduciary capacity that is not regulated by Act No. 642 of the Public Acts of 1978 but is authorized by the banking code of 1969, Act No. 319 of the Public Acts of 1969, being sections 487.301 to 487.598 of the Michigan Compiled Laws, or the national bank act, chapter 106, 13 Stat. 99, shall not be personally liable as an owner or operator of the property under this act. This subsection shall not do either of the following:

(a) Relieve the fiduciary from personal liability as the result of the fiduciary's assumption of personal liability, negligence, gross negligence, or reckless, willful, or intentional misconduct.

(b) Prevent claims against the assets that are part of or all of the estate or trust that contains the facility; any other estate or trust of the decedent, grantor, ward, or other person whose estate or trust contains the facility that is administered by the commercial lending institution; or any other estate or trust of the decedent, grantor, ward, or other person whose estate or trust contains the facility. Such claims may be asserted against the fiduciary in its representative capacity, whether or not the fiduciary is personally liable.

(12) A commercial lending institution that has not participated in the management of a property prior to assuming ownership or control of the property in a fiduciary capacity, and pursuant to a fiduciary agreement entered into after August 1, 1990 owns or controls the property in a fiduciary capacity that is not regulated by Act No. 642 of the Public Acts of 1978 but is authorized by the banking code of 1969, Act No. 319 of the Public Acts of 1969, being sections 487.301 to 487.598 of the Michigan Compiled Laws, or the national bank act, chapter 106, 13 Stat. 99, that has served only in an administrative, custodial, or financial capacity with respect to the property, and has not exercised sufficient involvement to control the owner's or operator's handling of a hazardous substance, shall not be personally liable as an owner or operator of the property under this act. This subsection shall not do either of the following:

(a) Relieve the fiduciary from personal liability as the result of the fiduciary's assumption of personal liability, negligence, gross negligence, or reckless, willful, or intentional misconduct.

(b) Prevent claims against the assets that are part of or all of the estate or trust that contains the facility; any other estate or trust of the decedent, grantor, ward, or other person whose estate or trust contains the facility that is administered by the commercial lending institution; or any other estate or trust of the decedent, grantor, ward, or other person whose estate or trust contains the facility. Such claims may be asserted against the fiduciary in its representative capacity, whether or not the fiduciary is personally liable.

(13) The defenses to liability under section 12 in subsections (7) to (12) in regard to a facility do not apply when a commercial lending institution, or its agent, employee, or a person retained by the commercial lending institution, caused or contributed to a release or threat of release.

(14) As used in subsections (8) and (9), "foreclosure environmental assessment" means to conduct, or cause to be conducted, a visual inspection of property and a review of the ownership and use history of the property to determine whether there is a release or threat of release. If a visual inspection or the ownership and use history, or both, show that there may be a release or threat of release, a site specific on-site evaluation of the nature and extent, if any, of the release or threat of release shall be conducted, and an inspection of all permanent structures on the property to determine the presence of a hazardous substance shall be conducted.

History: Add. 1990, Act 233, Eff. July 1, 1991.

299.612b Liability of response activity contractor; effect of warranty; liability of employer to employee; exemption of governmental employer from liability; availability of defense; effect of section on liability; definitions.

Sec. 12b. (1) A person that is a response activity contractor for any release or threatened release is not liable to any person for injuries, costs, damages, expenses, or

other liability, including, but not limited to, claims for indemnification or contribution and claims by third parties for death, personal injuries, illness, or loss of or damages to property or economic loss that result from the release or threatened release. This subsection shall not apply if a release or threatened release is caused by conduct of the response activity contractor that is negligent, grossly negligent, or that constitutes intentional misconduct.

(2) This section shall not affect the liability of a person under any warranty under federal, state, or common law. This subsection shall not affect the liability of an employer who is a response activity contractor to any employee of the employer under law, including any provision of law relating to worker's compensation.

(3) An employee of this state or a local unit of government who provides services relating to a response activity while acting within the scope of his or her authority as a governmental employee shall have the same exemption from liability as is provided to the response activity contractor under this section.

(4) The defense provided by section 12a(1)(c) is not available to any person that may be liable under section 12 with respect to any costs or damages caused by any act or omission of a response activity contractor. Except as provided in this section, this section shall not affect the liability under this act or under any other federal or state law of any person.

(5) This section shall not affect the plaintiff's burden of establishing liability under this act.

(6) As used in this section:

(a) "Response activity contract" means a written contract or agreement entered into by a response activity contractor with 1 or more of the following:

(i) The department.

(ii) The department of public health.

(iii) A person that may be liable under section 12 that is carrying out an agreement to undertake a response activity under this act.

(b) "Response activity contractor" means 1 or both of the following:

(i) A person that enters into a response activity contract with respect to a release or threatened release and is carrying out the terms of a contract.

(ii) A person that is retained or hired by a person described in subparagraph (i) to provide any service relating to a response activity.

History: Add. 1990, Act 233, Eff. July 1, 1991.

299.612c Divisibility of harm and apportionment of liability; liability for indivisible harm; contribution; factors in allocating response activity costs and damages; reallocation of uncollectible amount; effect of consent order; effect of state obtaining less than complete relief; contribution from person not party to consent order; subordinate rights in action for contribution.

Sec. 12c. (1) If 2 or more persons acting independently cause a release or threat of release that results in response activity costs, or damages for injury to, destruction of, or loss of natural resources, and there is a reasonable basis for division of harm according to contribution of each person, each person is subject to liability under section 12 only for the portion of the total harm that the person caused. However, a person seeking to limit

its liability on the ground that the entire harm is capable of division shall have the burden of proof as to the divisibility of the harm and as to the apportionment of liability.

(2) If 2 or more persons cause or contribute to an indivisible harm that results in response activity costs, or damages for injury to, destruction of, or loss of natural resources, each person is subject to liability under section 12 for the entire harm.

(3) A person may seek contribution from any other person who is liable or may be liable under section 12 during or following a civil action brought under this act. However, a person that is participating in the allocation process described in section 11f or 11g shall not be subject to a contribution action during the pendency of that allocation process. This subsection shall not diminish the right of a person to bring an action for contribution in the absence of a civil action by the state under this act. The court shall consider all of the following factors in allocating response activity costs and damages among liable persons:

(a) Each person's relative degree of responsibility in causing the release or threat of release.

(b) The principles of equity pertaining to contribution.

(c) The degree of involvement of and care exercised by the person with regard to the hazardous substance.

(d) The degree of cooperation by the person with federal, state, or local officials to prevent, minimize, respond to, or remedy the release or threat of release.

(e) Whether equity requires that the liability of some of the persons should constitute a single share.

(4) If, in an action for contribution under subsection (3), the court determines that all or part of a person's share of liability is uncollectible from that person, then the court may reallocate any uncollectible amount among the other persons according to the factors listed in subsection (3). A person whose share is determined to be uncollectible shall continue to be subject to contribution and to any continuing liability to the state.

(5) A person that has resolved its liability to the state in an administrative or judicially approved consent order shall not be liable for claims for contribution regarding matters addressed in the consent order. The consent order does not discharge any of the other persons liable under section 12 unless the terms of the consent order provide for this discharge, but the potential liability of the other persons is reduced by the amount of the consent order.

(6) If the state obtains less than complete relief from a person that has resolved its liability to the state in an administrative or judicially approved consent order under this act, the state may bring an action against any other person liable under section 12 that has not resolved its liabilities.

(7) A person that has resolved its liability to the state for some or all of a response activity in an administrative or judicially approved consent order may seek contribution from any person that is not a party to the consent order described in subsection (5).

(8) In an action for contribution under this section, the rights of any person that has resolved its liability to the state shall be subordinate to the rights of the state, if the state files an action under this act.

299.612d Indemnification, hold harmless, or similar agreement or conveyance; subrogation.

Sec. 12d. (1) An indemnification, hold harmless, or similar agreement or conveyance is not effective to transfer from a person that may be liable under section 12 to the state for evaluation or response activity costs or damages for a release or threat of release to any other person the liability imposed under this act. This section shall not bar an agreement to insure, hold harmless, or indemnify a party to the agreement for liability under this act.

(2) This act does not bar a cause of action that a person subject to liability under this act, or a guarantor, has or would have, by reason of subrogation or otherwise against any person.

History: Add. 1990, Act 233, Eff. July 1, 1991.

299.613 Limitations on liability; circumstances requiring total costs and damages.

Sec. 13. (1) Except as provided in subsection (2), the liability under this act for each release or threat of release shall not exceed the total of all the costs of response activities, fines, and exemplary damages, plus \$50,000,000.00 damages for injury to, destruction of, or loss of natural resources resulting from the release or threat of release, including the reasonable costs of assessing the injury, destruction, or loss resulting from the release or threat of release.

(2) Notwithstanding the limitations in subsection (1), the liability of a person under this act shall be the full and total costs and damages listed in subsection (1), in either of the following circumstances:

(a) The release or threatened release of a hazardous substance was the result of willful misconduct or gross negligence of the party.

(b) The primary cause of the release or threat of release was a knowing violation of applicable safety, construction, or operating standards or regulations.

History: Add. 1990, Act 233, Eff. July 1, 1991.

299.614 Covenant not to sue generally; future enforcement action.

Sec. 14. (1) The state may, in its discretion, provide a person with a covenant not to sue concerning any liability to the state under this act, including future liability, resulting from a release or threatened release addressed by response activities, whether that action is on a facility or off a facility, if each of the following is met:

(a) The covenant not to sue is in the public interest.

(b) The covenant not to sue would expedite response activity consistent with rules promulgated under this act.

(c) There is full compliance with a consent order under this act for response to the release or threatened release concerned.

(d) The response activity has been approved by the department.

(2) The state shall provide a person to whom the department is authorized under subsection (1) to issue a covenant not to sue for the portion of response activity described in subdivision (a) or (b) with a covenant not to sue with respect to future liability to the state under this act for a future release or threatened release, and a person provided the covenant not to sue shall not be liable to the state under section 12 with respect to that

release or threatened release at a future time. The portion of response activity to which the covenant not to sue pertains is either of the following:

(a) The transport and secure disposition off site of hazardous substances in a facility meeting the requirements of sections 3004(c), (d), (e), (f), (g), (m), (o), (p), (u), and (v) and 3005(c) of the solid waste disposal act, title II of Public Law 89-272, 42 U.S.C. 6924 and 6925, if the department has required off-site disposition and has rejected proposed remedial action that is consistent with the rules promulgated under this act that does not include off-site disposition.

(b) The treatment of hazardous substances so as to destroy, eliminate, or permanently immobilize the hazardous constituents of the substances, so that, in the judgment of the department, the substances no longer present any current or currently foreseeable future significant risk to the public health, safety, or welfare, or to the environment, no by-product of the treatment or destruction process presents any significant hazard to the public health, safety, or welfare, or the environment, and all by-products are themselves treated, destroyed, or contained in a manner that assures that the by-products do not present any current or currently foreseeable future significant risk to the public health, safety, or welfare, or the environment.

(3) A covenant not to sue concerning future liability to the state shall not take effect until the department certifies that remedial action has been completed in accordance with the requirements of this act at the facility that is the subject of the covenant.

(4) In assessing the appropriateness of a covenant not to sue granted under subsection (1) and any condition to be included in a covenant not to sue under subsection (1) or (2), the state shall consider whether the covenant or condition is in the public interest on the basis of factors such as the following:

(a) The effectiveness and reliability of the remedial action, in light of the other alternative remedial actions considered for the facility concerned.

(b) The nature of the risks remaining at the facility.

(c) The extent to which performance standards are included in the consent order.

(d) The extent to which the response activity provides a complete remedy for the facility, including a reduction in the hazardous nature of the substances at the facility.

(e) The extent to which the technology used in the response activity is demonstrated to be effective.

(f) Whether the fund or other sources of funding would be available for any additional response activities that might eventually be necessary at the facility.

(g) Whether response activity will be carried out, in whole or in significant part, by persons that may be liable under section 12.

(5) A covenant not to sue under this section shall be subject to the satisfactory performance by a person of its obligations under the agreement concerned.

(6) Except for the portion of the remedial action that is subject to a covenant not to sue under subsection (2) or under section 11f or 11g, a covenant not to sue a person concerning future liability to the state shall include an exception to the covenant that allows the state to sue that person concerning future liability resulting from the release or threatened release that is the subject of the covenant if the liability arises out of conditions that are unknown at the time the department certifies under subsection (3) that remedial action has been completed at the facility concerned.

(7) In extraordinary circumstances, the state may determine, after assessment of relevant factors such as those referred to in subsection (4) and volume, toxicity, mobility, strength of evidence, ability to pay, litigative risks, public interest considerations, precedential value, and inequities and aggravating factors, not to include the exception in subsection (6) if other terms, conditions, or requirements of the agreement containing the covenant not to sue are sufficient to provide all reasonable assurances that the public health and the environment will be protected from any future releases at or from the facility.

(8) The state is authorized to include any provisions providing for future enforcement action under section 10f or 16 that in the discretion of the department are necessary and appropriate to assure protection of the public health, safety, welfare, and the environment.

History: Add. 1990, Act 234, Eff. July 1, 1991.

Administrative Rules: R 299.5101 et seq. of the Michigan Administrative Code.

299.614a Redevelopment or reuse of facility; covenant not to sue; conditions; demonstration; limitation; reservation of right to assert claims; Irrevocable right of entry; monitoring compliance.

Sec. 14a. (1) The state may provide a person who proposes to redevelop or reuse a facility, including a vacant manufacturing or abandoned industrial site, with a covenant not to sue concerning liability under section 12, if all of the following conditions are met:

(a) The covenant not to sue is in the public interest.

(b) The covenant not to sue will yield new resources to facilitate implementation of response activity.

(c) The covenant not to sue would expedite response activity consistent with the rules promulgated under this act.

(d) Based upon available information, the department determines that the redevelopment or reuse of the facility is not likely to do any of the following:

(i) Exacerbate or contribute to the existing release or threat of release.

(ii) Interfere with the implementation of response activities.

(iii) Pose health risks related to the release or threat of release to persons who may be present at or in the vicinity of the facility.

(e) The proposal to redevelop or reuse the facility has economic development potential.

(2) A person that requests a covenant not to sue under subsection (1) shall demonstrate to the satisfaction of the state all of the following:

(a) That the person is financially capable of redeveloping and reusing the facility in accordance with the covenant not to sue.

(b) That the person is not affiliated in any way with any person that may be liable under section 12 for a release or threat of release at the facility.

(c) That the redevelopment or reuse of the facility by the person will not result in a release or threat of release.

(3) A covenant not to sue issued under this section shall address only past releases or threats of release at a facility and shall expressly reserve the right of the state to assert all other claims against the person who proposes to redevelop or reuse the facility, including, but not limited to, those claims arising from any of the following:

(a) The release or threat of release of any hazardous substance resulting from the redevelopment or reuse of the facility.

(b) Exacerbation or contribution of the existing release or threat of release.

(c) Interference with, or failure to cooperate with the department, its contractors, or other persons conducting response activities approved by the department.

(d) Failure to exercise due care with respect to any release or threat of release at the facility.

(4) A covenant not to sue issued under this section shall provide for an irrevocable right of entry to the department, its contractors, or other persons performing response activity related to the release or threat of release addressed by the covenant not to sue for the purposes listed in section 10d(3)(a) through (e) and for monitoring compliance with the covenant not to sue.

History: Add. 1990, Act 234, Eff. July 1, 1991.

Administrative Rules: R 299.5101 et seq. of the Michigan Administrative Code.

299.614b Consent order; settlement.

Sec. 14b. (1) The director and the attorney general may enter into a consent order with a person liable under section 12 or any group of persons liable under section 12 to perform a response activity if the director and the attorney general determine that the persons liable under section 12 will properly implement the response activity, and that the consent order is in the public interest, will expedite effective response activity, and will minimize litigation. The consent order may provide, as determined appropriate by the director and the attorney general, for implementation by a person or any group of persons liable under section 12 of any portion of response activity at the facility. A decision of the attorney general not to enter into a consent order under this act is not subject to judicial review.

(2) Whenever practicable and in the public interest, as determined by the director, the director and the attorney general shall as promptly as possible reach a final settlement with a person in an administrative or civil action under this act if this settlement involves only a minor portion of the response costs at the facility concerned and, in the judgment of the director and the attorney general, the conditions in either of the following are met:

(a) Both of the following are minimal in comparison to other hazardous substances at the facility:

(i) The amount of the hazardous substances contributed by that person to the facility.

(ii) The toxic or other hazardous effects of the substances contributed by that person to the facility.

(b) Except as provided in subsection (3), the person meets all of the following conditions:

(i) The person is the owner of the real property on or in which the facility is located.

(ii) The person did not conduct or permit the generation, transportation, storage, treatment, or disposal of any hazardous substance at the facility.

(iii) The person did not contribute to the release or threat of release of a hazardous substance at the facility through any action or omission.

(3) A settlement shall not be made under subsection (2)(b) if the person purchased the real property with actual or constructive knowledge that the property was used for the generation, transportation, storage, treatment, or disposal of a hazardous substance.

(4) A settlement under subsection (2) may be set aside if information obtained after the settlement indicates that the person settling does not meet the conditions set forth in subsection (2)(a) or (b).

History: Add. 1990, Act 234, Eff. July 1, 1991.

299.615 Civil action; jurisdiction; conditions; notice; awarding costs and fees; rights not impaired; venue.

Sec. 15. (1) Except as otherwise provided in this act, a person, including a local unit of government on behalf of its citizens, whose health or enjoyment of the environment is or may be adversely affected by a release from a facility or threat of release from a facility, other than a permitted release or a release in compliance with applicable federal, state, and local air pollution control laws, by a violation of this act or a rule promulgated or order issued under this act, or by the failure of the directors to perform a nondiscretionary act or duty under this act, may commence a civil action against any of the following:

(a) An owner or operator for injunctive relief necessary to prevent irreparable harm to the public health, safety, or welfare, or the environment from a release or threatened release in relation to that facility.

(b) A person that is alleged to be in violation of this act or a rule promulgated or order issued under this act in relation to that facility.

(c) One or more of the directors if it is alleged that 1 or more of the directors failed to perform a nondiscretionary act or duty under this act.

(2) The circuit court shall have jurisdiction in actions brought under subsection (1)(a) to grant injunctive relief necessary to protect the public health, safety, or welfare, or the environment from a release or threatened release. The circuit court shall have jurisdiction in actions brought under subsection (1)(b) to enforce this act or a rule promulgated or order issued under this act by ordering such action as may be necessary to correct the violation, and to impose any civil fine provided for in this act for the violation. A civil fine recovered under this section shall be deposited in the fund. The circuit court shall have jurisdiction in actions brought under subsection (1)(c) to order 1 or more of the directors to perform the nondiscretionary act or duty concerned.

(3) An action shall not be filed under subsection (1)(a) or (b) unless all of the following conditions exist:

(a) The plaintiff has given at least 60 days' notice in writing of the plaintiff's intent to sue, the basis for the suit, and the relief to be requested to each of the following:

- (i) The department.
- (ii) The attorney general.
- (iii) The proposed defendants.

(b) The state has not commenced and is not diligently prosecuting an action under this act or under other appropriate legal authority to obtain injunctive relief concerning the facility or to require compliance with this act or a rule or an order under this act.

(4) An action shall not be filed under subsection (1)(c) until the plaintiff has given in writing at least 60 days' notice to the directors of the plaintiff's intent to sue, the basis for the suit, and the relief to be requested.

(5) In issuing a final order in an action brought pursuant to this section, the court may award costs of litigation, including reasonable attorney and expert witness fees to the

prevailing or substantially prevailing party if the court determines that an award is appropriate.

(6) This section shall not affect or otherwise impair the rights of any person under federal, state, or common law.

(7) An action under subsection (1)(a) or (b) shall be brought in the circuit court for the circuit in which the alleged release, threatened release, or other violation occurred. An action under subsection (1)(c) shall be brought in the circuit court for Ingham county.

History: Add. 1990, Act 234, Eff. July 1, 1991.

Administrative Rules: R 299.5101 et seq. of the Michigan Administrative Code.

299.615a Grant program; rules; eligibility for grants; availability of appropriations.

Sec. 15a. (1) The department may promulgate rules to establish a grant program to provide grants to individuals who may be adversely affected by hazardous substances from a site that is listed under section 6, and who live within 2 miles of the listed site. The grants shall be provided only to enable individuals to obtain expert advice and technical assistance regarding the response activities at sites that affect them. Grants shall not be issued under this section until the department promulgates rules to establish criteria for the issuing of grants. In determining which applicants receive grants, the department shall consider the potential health impacts of the site on the applicant, the complexity and scope of the necessary remedial action at the site, and the ability of the applicant to obtain expert advice and technical assistance in the absence of the grant.

(2) Persons that may be liable under section 12 shall not be eligible for grants under this section.

(3) Grants shall be provided under this section subject to the availability of appropriations from the general fund.

History: Add. 1990, Act 234, Eff. July 1, 1991.

299.616 Additional relief; providing copy of complaint to attorney general; jurisdiction; judicial review; intervenor.

Sec. 16. (1) In addition to other relief authorized by law, the attorney general may, on behalf of the state, commence a civil action seeking 1 or more of the following:

(a) Temporary or permanent injunctive relief necessary to protect the public health, safety, or welfare, or the environment from the release or threat of release.

(b) Recovery of state response activity costs pursuant to section 12.

(c) Damages for the full value of injury to, destruction of, or loss of natural resources resulting from the release or threat of release, including the reasonable costs of assessing the injury, destruction, or loss resulting from the release or threat of release.

(d) A declaratory judgment on liability for future response costs and damages.

(e) A civil fine of not more than \$1,000.00 for each day of noncompliance without sufficient cause with a written request of the director pursuant to section 10a(4). A fine imposed under this subdivision shall be based on the seriousness of the violation and any good faith efforts of the person to comply with the request of the director.

(f) A civil fine of not more than \$10,000.00 for each day of violation of this act or a rule promulgated under this act. A fine imposed under this subdivision shall be based

upon the seriousness of the violation and any good faith efforts of the person to comply with this act or a rule promulgated under this act.

(g) A civil fine of not more than \$25,000.00 for each day of violation of a judicial order or an administrative order issued pursuant to section 10f, including exemplary damages pursuant to section 10f.

(h) Enforcement of an administrative order issued pursuant to section 10f.

(i) Enforcement of information gathering and entry authority pursuant to section 10d.

(j) Enforcement of the reporting requirements under section 10a(2) and (6).

(k) Any other relief necessary for the enforcement of this act.

(2) If an action is brought under this act by a plaintiff other than the attorney general, the plaintiff shall, at the time of filing, provide a copy of the complaint to the attorney general.

(3) Except as otherwise provided in this act, an action brought under this act may be brought in the circuit court for the county of Ingham, in the county in which the defendant resides, has a place of business, or in which the registered office of a defendant corporation is located, or in the county where the release occurred.

(4) A state court shall not have jurisdiction to review challenges to a response activity selected or approved by the department under this act, or to review an administrative order issued under this act in any action except an action that is 1 of the following:

(a) An action to recover response costs, damages, or for contribution.

(b) An action by the state to enforce an administrative order under this act or by any other person under section 15(1)(b) to enforce an administrative order or to recover a fine for violation of an order.

(c) An action pursuant to section 10f(5) for review of a decision by the department denying or limiting reimbursement.

(d) An action pursuant to section 15 challenging a response activity selected or approved by the department, if such action is filed after the completion of the response activity.

(e) An action by the state pursuant to section 12(6) to compel response activity.

(5) In any judicial action under this act, judicial review of any issues concerning the selection or adequacy of a response activity taken, ordered, or agreed to by the state shall be limited to the administrative record. If the court finds that the record is incomplete or inadequate, the court may consider supplemental material in the action. In considering objections raised in a judicial action under this act, the court shall uphold the state's decision in selecting a response activity unless the objecting party can demonstrate based on the administrative record that the decision was arbitrary and capricious or otherwise not in accordance with law. In reviewing alleged procedural errors, the court may disallow costs or damages only to the extent the errors were so serious and related to matters of such central importance that the activity would have been significantly changed had the errors not been made.

(6) In an action commenced under this act, any person may intervene as a matter of right if that person claims an interest relating to the subject matter of the action and is situated so that the disposition of the action may, as a practical matter, impair or impede the person's ability to protect that interest, unless the court finds the person's interest is adequately represented by an existing party.

History: Add. 1990, Act 233, Eff. July 1, 1991.

Administrative Rules: R 299.5101 et seq. of the Michigan Administrative Code.

299.616a Unpaid costs and damages as lien on facility; priority; commencement and sufficiency of lien; petition; notice of hearing; Increased value as lien; perfection, duration, and release of lien; document stating completion of response activities.

Sec. 16a. (1) All unpaid costs and damages for which a person is liable under section 12 shall constitute a lien in favor of the state upon a facility that has been the subject of response activity by the state and is owned by that person. A lien under this subsection shall have priority over all other liens and encumbrances except liens and encumbrances recorded before the date the lien under this subsection is recorded. A lien under this subsection arises when the state first incurs costs for response activity at the facility for which the person is responsible.

(2) If the attorney general determines that the lien provided in subsection (1) is insufficient to protect the interest of the state in recovering response costs at a facility, the attorney general may file a petition in the circuit court of the county in which the facility is located seeking either or both of the following:

(a) A lien upon the facility subject to response activity that takes priority over all other liens and encumbrances that are or have been recorded on the facility.

(b) A lien upon real or personal property or rights to real or personal property, other than the facility, owned by the person described in subsection (1), having priority over all other liens and encumbrances except liens and encumbrances recorded prior to the date the lien under this subsection is recorded. However, the following are not subject to the lien provided for in this subdivision:

(i) Assets of a qualified pension plan or individual retirement account under the internal revenue code.

(ii) Assets held expressly for the purpose of financing a dependent's college education.

(iii) Up to \$500,000.00 in nonbusiness real or personal property or rights to nonbusiness real or personal property, except that not more than \$25,000.00 of this amount may be cash or securities.

(3) A petition submitted pursuant to subsection (2) shall set forth with as much specificity as possible the type of lien sought, the property that would be affected, and the reasons the attorney general believes the lien is necessary. Upon receipt of a petition under subsection (2), the court shall promptly schedule a hearing to determine whether the petition should be granted. Notice of the hearing shall be provided to the attorney general, the property owner, and any persons holding liens or perfected security interests in the real property subject to response activity.

(4) In addition to the lien provided in subsections (1) and (2), if the state incurs costs for response activity that increases the market value of real property that is the location of a release or threatened release, the increase in value caused by the state funded response activity, to the extent the state incurred unpaid costs and damages, shall constitute a lien in favor of the state upon the real property. This lien shall have priority over all other liens or encumbrances that are or have been recorded upon the property.

(5) A lien provided in subsection (1), (2), or (4) is perfected against real property when a notice of lien is filed by the department with the register of deeds in the county in which the real property is located. A lien upon personal property provided in subsection (2) is perfected when a notice of lien is filed by the department in accordance with applicable law and regulation for the perfection of a lien on that type of personal property. In

addition, the department shall, at the time of the filing of the notice of lien, provide a copy of the notice of lien to the owner of that property by certified mail.

(6) A lien under this section shall continue until the liability for the costs and damages is satisfied or resolved or becomes unenforceable through the operation of the statute of limitations provided in section 17.

(7) Upon satisfaction of the liability secured by the lien, the department shall file a notice of release of lien in the same manner as provided in subsection (5).

(8) If the department, at or prior to the time of filing the notice of release of lien pursuant to subsection (7), has made a determination that the person liable under section 12 has completed all of the response activity at the real property pursuant to the approved remedial action plan, the department shall execute and file with the notice of release of lien a document stating that all response activities required in the approved remedial action plan have been completed.

History: Add. 1990, Act 233, Eff. July 1, 1991.

299.616b Applicability of penalties; conduct constituting felony; penalties; jurisdiction; criminal liability for substantial endangerment to public health, safety, or welfare; determination; knowledge attributable to defendant; award; rules; definition.

Sec. 16b. (1) The penalties provided in this section only apply to a release that occurs after the effective date of this section.

(2) A person that knowingly releases or causes the release of a hazardous substance contrary to applicable federal, state, or local requirements or contrary to any permit or license held by that person, and that knew or should have known that the release could cause personal injury or property damage, or that intentionally makes a false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this act and rules promulgated under this act, or that intentionally renders inaccurate any monitoring device or record required to be maintained under this act or a rule promulgated under this act, is guilty of a felony and shall be fined not less than \$2,500.00 or more than \$25,000.00 for each violation. The court may impose an additional fine of not more than \$25,000.00 for each day during which the release occurred. If the conviction is for a violation committed after a first conviction of the person under this subsection, the court shall impose a fine of not less than \$25,000.00 and not more than \$50,000.00 per day of violation. Upon conviction, in addition to a fine, the court in its discretion may sentence the defendant to imprisonment for not more than 2 years or impose probation upon a person for a violation of this act. With the exception of the issuance of criminal complaints, issuance of warrants, and the holding of an arraignment, the circuit court for the county in which the violation occurred has exclusive jurisdiction.

(3) Upon a finding by the court that the action of a criminal defendant poses or posed a substantial endangerment to public health, safety, or welfare, the court shall impose, in addition to the penalties set forth in subsection (2), a fine of not less than \$1,000,000.00 and, in addition to a fine, a sentence of 5 years' imprisonment.

(4) To find a defendant criminally liable for substantial endangerment under subsection (3), the court shall determine that the defendant knowingly or recklessly acted in such a manner as to cause a danger of death or serious bodily injury and that either of the following has occurred:

(a) The defendant had an actual awareness, or belief, or understanding, that his or her conduct would cause a substantial danger of death or serious bodily injury.

(b) The defendant acted in gross disregard of the standard of care that any reasonable person would observe in similar circumstances.

(5) Knowledge possessed by a person other than the defendant under subsection (4) may be attributable to the defendant if the defendant took affirmative steps to shield himself or herself from the relevant information.

(6) The department may pay an award of up to \$10,000.00 to an individual who provides information leading to the arrest and conviction of a person for a violation of this section. The department shall promulgate rules that prescribe criteria for granting awards under this section. An award shall not be made under this section until rules are promulgated prescribing the criteria for making awards. Awards under this subsection may be paid from the Michigan environmental assurance fund if enabling legislation creating the fund is enacted into law.

(7) "Serious bodily injury" means bodily injury that involves a substantial risk of death, unconsciousness, extreme physical pain, protracted and obvious disfigurement, or protracted loss or impairment of the function of a bodily member, organ, or mental faculty.

History: Add. 1990, Act 233, Eff. July 1, 1991.

Administrative Rules: R 299.5101 et seq. of the Michigan Administrative Code.

299.617 Limitation periods.

Sec. 17. (1) Except as provided in subsection (2), the limitation period for filing actions under this act shall be as follows:

(a) For the recovery of response activity costs and natural resources damages pursuant to section 12(2)(a), (b), or (c), within 6 years of initiation of physical on-site construction activities for the remedial action selected or approved by the department at a facility, except as provided in subdivision (b).

(b) For 1 or more subsequent actions for recovery of response activity costs pursuant to section 12, at any time during the response activity, if commenced not later than 3 years after the date of completion of all response activity at the facility.

(c) For civil fines under this act, within 3 years after discovery of the violation for which the civil fines are assessed.

(2) For recovery of response activity costs and natural resources damages that accrued prior to the effective date of this section, the limitation period for filing actions under this act shall be 3 years from that effective date.

History: Add. 1990, Act 234, Eff. July 1, 1991.

299.618 Citizens review board; establishment; appointment and qualifications of members; chairperson; report; recommendations; evaluation; disbanding of review board; funding; compensation.

Sec. 18. (1) Two years after the effective date of this section, a citizens review board shall be established. The review board shall consist of 6 members of the general public and the director of the legislative service bureau division of science and technology who shall serve as the nonvoting chairperson. The public members of the review board shall reflect a cross section of small business, large corporate business, local units of government, and environmental organizations. Specifically, the review board shall have 3

members representative of the environmental community and 3 members representative of business interests or local units of government, or both.

(2) Two members of the review board shall be appointed by the governor, 2 members shall be appointed by the speaker of the house of representatives, and 2 members shall be appointed by the senate majority leader.

(3) The review board shall submit to the standing committees of the senate and the house of representatives that address legislation pertaining to the environment and the natural resources of this state a report that contains a full review of the operation of the amendatory act that added this section. The report shall include a summary of the effectiveness of the amendatory act that added this section, recommendations for amendments to this act, and other information that the legislative committees described in this subsection may request at the time of the establishment of the review board.

(4) The department shall provide the review board with both of the following:

(a) The department's recommendations regarding amendments to this act that the department concludes would improve this act.

(b) The department's evaluation of the effectiveness of this act.

(5) Within 6 months after the establishment of the review board, the review board shall issue its report as provided in this section and the review board shall be disbanded. Funding for the review board shall be provided from the fund and shall not exceed \$100,000.00. Members of the review board shall receive as compensation a per diem allotment equal to the per diem received by the commission of natural resources and shall receive actual and necessary expenses incurred by review board members in carrying out their responsibilities under this section.

History: Add. 1990, Act 233, Eff. July 1, 1991.

**DEPARTMENT OF NATURAL RESOURCES
NATURAL RESOURCES COMMISSION**

ENVIRONMENTAL CONTAMINATION RESPONSE ACTIVITY

(By authority conferred on the department of natural resources and the commission of natural resources by section 5 of Act No. 307 of the Public Acts of 1982, as amended, section 13 of Act No. 328 of the Public Acts of 1988, and section 33 of Act No. 306 of the Public Acts of 1969, as amended, being §§299.605, 299.683, and 24.233 of the Michigan Compiled Laws)

PART 1. GENERAL PROVISIONS

R 299.5101 Definitions; A to I.

Rule 101. As used in these rules:

(a) "Act" means Act No. 307 of the Public Acts of 1982, as amended, being §299.601 et seq. of the Michigan Compiled Laws.

(b) "Ambient air" means that part of the atmosphere outside of buildings to which the general public has access.

(c) "Aquifer" means a geological formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells or springs.

(d) "Department" means the department of natural resources.

(e) "Department of public health" means the Michigan department of public health.

(f) "Direct contact" means exposure to hazardous substances through ingestion or dermal contact.

(g) "Director" means the director of the department.

(h) "Emergency response" means a response activity taken to eliminate or control an immediate public health threat or immediate environmental threat.

(i) "Feasibility study" means a process for developing, evaluating, and selecting an appropriate remedial action.

(j) "Free product" means a hazardous substance or hazardous substances in a liquid phase which are not dissolved in water and which have been released into the environment.

(k) "Fund" or "funds" means the environmental response fund created pursuant to the provisions of section 9 of the act or the environmental protection bond fund created pursuant to the provisions of section 6 of Act No. 328 of the Public Acts of 1988, being §299.676 of the Michigan Compiled Laws, or both.

(l) "Groundwater" means water below the land surface in the zone of saturation.

(m) "Incident" means the subject of a report to the department which will be evaluated to determine whether there is sufficient evidence to conclude that a site of environmental contamination exists.

(n) "Indicator chemical" means a chemical or substance selected for monitoring and analysis during any phase of response activity for the purpose of characterizing the site or assessing the risk posed by hazardous substances. Indicator chemicals shall be representative of the hazardous substances at the site, taking into account the physical, chemical, and toxicological properties of the substances.

(o) "Interim response activity" means the cleanup or removal of released hazardous substances from the environment or the taking of such other actions, prior to the selection of a remedial action, as may be necessary to prevent, minimize, or mitigate injury to the public health, safety, or welfare, the environment, or natural resources, which injury might otherwise result from a release of a hazardous substance. The term also means the taking of such other actions as may be necessary to prevent, minimize, or mitigate the potential release of a discarded hazardous substance.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5103 Definitions; O to V.

Rule 103. As used in these rules:

(a) "Operation and maintenance" means the activities necessary to provide for the continued effectiveness and integrity of a response activity after construction of the remedial action measure or measures is complete. The term includes long-term activities such as groundwater removal and treatment.

(b) "Potentially responsible party" means a person whose action or negligence may have caused a condition that requires response activity or who may be otherwise responsible for response activity under state or federal law.

(c) "Remedial action" means the cleanup, removal, containment, isolation, treatment, or monitoring of hazardous substances released into the environment, or the taking of such other actions as may be necessary to prevent, minimize, or mitigate injury to the public health, safety, or welfare, the environment, or natural resources, which injury may otherwise result from a release of a hazardous substance or a potential release of a discarded hazardous substance.

(d) "Remedial design" means the preparation of construction plans and specifications necessary for implementation of a remedial action.

(e) "Remedial investigation" means an evaluation of a site to determine the nature, extent, and impact of a release and the collection of data necessary to conduct a feasibility study of alternate response activities. Such evaluations may include activities to determine any of the following:

(i) Geology.

(ii) Hydrology.

(iii) Soils.

(iv) Hydrogeology.

(v) Surface water and groundwater quality.

(vi) Air quality.

(vii) Identification and distribution of hazardous substances.

(vii) Pathways of exposure.

(f) "Site list" means the listings submitted to the legislature in November of each year pursuant to the provisions of section 6(d) of the act.

(g) "Volatile" means any compound that has a vapor pressure of more than 0.1 millimeter of mercury at standard conditions.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5105 Terms defined in act.

Rule 105. A term defined in the act has the same meaning when used in these rules.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5107 Applicability; authority of department or commission not limited by rules.

Rule 107. (1) These rules shall apply to all known sites of environmental contamination without regard to whether the property is publicly or privately owned. The provisions of parts 6 and 7 of these rules that deal with the selection of remedial action and cleanup criteria shall apply only to remedial actions undertaken after the effective date of these rules.

(2) Nothing in these rules shall be construed to limit the authority of the department or the natural resources commission to act pursuant to other existing statutes and rules.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5109 Compliance with other environmental statutes and rules required; facility utilization.

Rule 109. (1) Any action taken under the authority of these rules shall be in compliance with all applicable environmental statutes and rules.

(2) Any response activity that involves the storage, transport, treatment, or disposal of hazardous substances off-site shall utilize only vehicles or facilities licensed, if a license is required, under appropriate federal or state permits or authorization and other legal requirements.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5111 Construction of rules.

Rule 111. These rules shall not be construed to relieve a person from any obligation for the cost of evaluation or response activity related to a site for which the person is legally responsible or to relieve a person from the obligation to pay a fine, settlement, penalty, or damages.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5113 Identification of potentially responsible parties.

Rule 113. (1) The department shall, as soon as is practicable upon identification of a site, initiate appropriate actions to identify potentially responsible parties associated with the site.

(2) The department shall, as appropriate, use existing information-gathering authorities and coordinate such investigation with other state, local, and federal agencies.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5115 Notice to potentially responsible parties.

Rule 115. (1) Before beginning state-funded response activity at a site, the department shall provide notice to potentially responsible parties who have been identified.

(2) The notice, in the form of a letter mailed to the most recent known addresses of all identified potentially responsible parties, shall include the following information:

(a) A description of the action or actions being undertaken or proposed to be undertaken by the state and a request that the potentially responsible party carry out those actions in a timely manner. The time allowed for response shall be included in the letter and shall reflect the exigencies of the situation requiring response and the complexity of the requested action.

(b) A description of the nature and extent of contamination believed by the department to exist at the site.

(c) The names and addresses of other potentially responsible parties who have been or are being sent notice letters for the site in question.

(d) The location of files used by the department in developing the notice.

(e) Notification that if the potentially responsible parties fail to adequately implement the necessary response actions, the department may do either or both of the following:

(i) Request that the attorney general take enforcement action.

(ii) Take the required corrective actions utilizing public funding. Any expenditure of public funds for this purpose is subject to cost-recovery actions by the state.

(3) The requirements of this rule shall not apply when the department has insufficient information to identify a potentially responsible party or parties or when the action being contemplated is an emergency response and the notice process would unreasonably delay the response.

(4) The notice described in subrule (1) of this rule shall be sent by a means which provides proof of delivery.

(5) A copy of the notice described in subrule (1) of this rule shall be provided to the local unit of government in which the site is located.

History: 1990 MR 6, Eff. July 12, 1990.

PART 2. SITE IDENTIFICATION AND LIST

R 299.5201 Site identification mechanisms.

Rule 201. (1) Incidents considered for inclusion on the site list pursuant to the provisions of section 6 of the act may be identified through a variety of mechanisms, including any of the following:

(a) Reports to, or investigations by, department staff.

(b) Reports from, or investigations by, department of public health staff.

(c) Reports from, or investigations by, local health departments or other local government agencies.

(d) Reports from, or investigations by, the state police or other law enforcement agencies.

(e) Reports from, or investigations by, the United States environmental protection agency or other federal agencies.

(2) Any person may report suspected contamination sites by mailing relevant information to: Director, Department of Natural Resources, Post Office Box 30028, Lansing, Michigan 48909.

(3) If the department believes that a public water supply may be threatened by an incident, the department shall inform the department of public health.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5203 List purpose.

Rule 203. The site list shall fulfill the requirements of section 6 of the act. The relative risk rankings established in the site list shall be 1 factor considered in the preparation of funding recommendations, consistent with the provisions of R 299.5301(7).

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5205 Distribution of site list.

Rule 205. The department shall widely distribute the site list required to be submitted to the legislature pursuant to the provisions of section 6(d) of the act. Mailing lists shall be established to facilitate the distribution of the site list to interested persons.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5207 Site list hearings.

Rule 207. (1) Before adoption of the site list, public hearings shall be held on the previous year's site list and any changes proposed in that list as specified in section 6(e) of the act.

(2) Public notice shall be given not less than 30 days before the hearings. For the purposes of this rule, public notice shall be a display advertisement which includes the dates, times, and locations of the public hearings and a brief explanation of the purpose of the hearings. Such notice shall be published in not less than 3 newspapers, including 1 newspaper of general circulation in the state. Information equivalent to the public notice shall be mailed to persons on the mailing list described in R 299.5205.

(3) All comments given at the public hearings and written material received by the department during the comment period that are relevant to the site list will be considered by the department as to how they may affect site scoring and rankings.

(4) Government agencies, including the department, shall have full standing as persons who are eligible to make comments and any such comments shall be considered by the department.

(5) Recommended changes in the site list shall be compiled in a report to the director.

(6) Only sites which have been subject to public hearing may appear on the site list.

(7) The department shall consider information received during the public comment period.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5209 Notice to potentially responsible parties of site listing.

Rule 209. (1) The department shall make a reasonable effort to notify the potentially responsible party or parties for a site, if any, which have been identified at the time of the decision to propose a site for inclusion on the site list of that decision. This notice shall be provided not less than 15 days before publication of the public notice required by R 299.5207(2).

(2) This rule shall apply only at the time a site is first proposed for inclusion on the site list. Sites which appeared on a site list in a previous year are not subject to this notice requirement.

(3) The inability or failure of the department to provide notice under this rule shall not limit the authority of the department to do any of the following:

(a) Proceed with listing a site.

(b) Proceed with state-funded response activity.

(c) Continue efforts to identify potentially responsible parties for the site in question.

(d) Request that potentially responsible parties who have been identified undertake necessary response activity consistent with part 5 of these rules.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5211 Inclusion of sites on site list; criteria.

Rule 211. (1) Incidents shall be considered by the department for inclusion on the site list if they meet the following criteria of subdivisions (a) and (b) or (a) and (c) of this subrule:

(a) The incident involves a hazardous substance that is present in a quantity which is or may become injurious to the environment or natural resources or to the public health, safety, or welfare. If a hazardous substance is present at concentrations above those determined pursuant to the provisions of R 299.5709 to R 299.5715 for the relevant media, the incident may be considered a site if a condition described in subdivision (b) or (c) of this subrule is also met. If a hazardous substance is present at levels above those determined pursuant to the provisions of R 299.5707, and there is insufficient information to conclude whether hazardous substance levels are above those determined pursuant to the provisions of R 299.5709 to R 299.5715, the incident may be considered a site if a condition described in subdivision (b) or (c) of this subrule is also met.

(b) There has been a release of a hazardous substance.

(c) There is a potential for the release of a discarded hazardous substance.

(2) Sites may be identified on the site list by the name or location of the facility where the release occurred, if it is known, or by the location of the environmental contamination if the location of the release is not known.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5213 Site list categories.

Rule 213. (1) Sites will be placed on the site list in the following categories:

(a) All sites of environmental contamination which are not included in the provisions of subdivisions (b) to (d) of this subrule.

(b) Sites where a remedial action plan has not been approved by the department and where interim response activity or evaluation has been or is being provided for by either of the following:

(i) The funds.

(ii) Responsible parties or other sources.

(c) Sites where a remedial action plan has been approved by the department and where a remedial action has been or is being provided for by either of the following:

(i) The funds.

(ii) Responsible parties or other sources.

(d) Sites where operation and maintenance has been or is being provided for by either of the following:

(i) The funds.

(ii) Responsible parties or other sources.

(2) The department shall maintain and, upon request, make available to the public records which are not otherwise protected from disclosure by law and which concern sites where remedial actions have been completed, including sites where land use restrictions have been imposed.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5215 Removal of sites from site list.

Rule 215. (1) A site shall be removed from the site list when the department's review of a site shows that the site did not meet, or no longer meets, the criteria specified in

R 299.5209(1). Removal of a site from the site list shall proceed in accordance with the provisions of this rule when response activity which meets the criteria specified in R 299.5705, if such activity is necessary, has been completed.

(2) Any person may request that a site be removed from the site list by submitting a petition to the department. Such a petition shall include all of the following information:

(a) A description and history of the site.

(b) A description of the nature and extent of the contamination that existed at the site at the time of its listing.

(c) A description of the response activities undertaken to remediate the contamination, consistent with the requirements of part 7 of these rules, or of the investigation conducted to determine that the site should be removed from the list without further response activities.

(d) An analysis of the effectiveness of the response activities undertaken to remediate contamination, including a description of any residual contamination which may exist at the site. The analysis shall include analytical data that documents the effectiveness of the response activities.

(e) Other site-specific information required by the department to determine the adequacy of the response activity described in the petition.

(3) It shall be the responsibility of the person who seeks the removal of a site from the site list to prepare and submit, to the department, the documentation required by the provisions of subrule (2) of this rule, unless the response activity has been conducted by the state. When the response activity has been conducted by the state, the department shall prepare the necessary documentation.

(4) Removal of sites from the site list shall generally be accomplished as part of the process described in R 299.5203 to R 299.5207. However, if the director concludes that the criteria specified in subrule (1) of this rule have been met and that circumstances warrant removal of the site from the site list before the next regularly scheduled hearing to be held in accordance with the provisions of R 299.5207(1) and (2), he or she shall prepare a notice of intent to remove the site from the site list. Such notice shall be published in 1 newspaper of general circulation that serves the area of the site and shall be provided to the municipality in which the site is located. Public comment on the notice of intent to remove the site from the site list shall be accepted for a period of not less than 30 days from the date of publication. The director may hold a public hearing on the proposed action.

(5) The director shall make a final determination whether to include the site on the next site list. The director shall consider any comments received in response to the notice described in subrule (4) of this rule.

(6) The director shall notify the person who requested that the site be removed from the list of his or her decision within 45 days of the end of the public comment period in the notice published pursuant to the provisions of subrule (4) of this rule or, if the director decides that the criteria specified in subrule (1) of this rule have not been met, within 7 days after making his or her decision.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5217 Annual review of sites.

Rule 217. (1) The department shall annually review site information received from others or generated by itself since the previous listings that were prepared pursuant to the provisions of section 6(d) of the act and shall determine if the information provides a

basis for the removal of any site from the site list in accordance with the provisions of R 299.5213 or results in a change in the relative risk rankings.

(2) Sites for which it is determined that the information supports a change in relative risk assessment shall be represented on the next site list according to the new assessment.

(3) Sites where there is no basis for a change in ranking shall be listed according to their previous assessments.

History: 1990 MR 6, Eff. July 12, 1990.

PART 3. FUNDING

R 299.5301 Funding recommendations.

Rule 301. (1) The director shall cooperate with the governor and the department of management and budget in developing funding recommendations required by the provisions of section 7 of the act.

(2) The director shall provide, to the governor, a list of sites which are believed to require monies from the funds for response activities.

(3) The director may implement response activities when a department division chief or 1 or more of the directors recommend that such an activity is necessary and appropriate. In evaluating the need for response activities, the director shall consider all of the following factors:

- (a) Existing or potential human exposure to hazardous substances.
- (b) Existing or potential environmental or natural resource damage.
- (c) The appropriateness and scope of the proposed response activity.

(4) The list required by subrule (2) of this rule shall include recommendations for purposes such as response activities, program administration, and contingencies which may arise during the upcoming fiscal year.

(5) The recommendations shall show the estimated cost at each site, including the type of response activity to be taken. Categories of response activity considered shall include all of the following:

- (a) Projected emergency response needs.
 - (b) Limited investigations at sites where funds have been spent for emergencies. The purpose of these limited investigations shall be to identify potentially responsible parties.
 - (c) Interim response activities.
 - (d) Investigations sufficient to prepare sites for remedial action.
 - (e) Response activities pursuant to a remedial action plan.
 - (f) Continuing necessary activities for previously funded projects.
- (6) Estimated costs for activities described in subrule (5) of this rule shall be identified as a lump sum for each type of activity.

(7) In determining the funding priority for the recommendations described in subrule (2) of this rule, and in managing appropriated funds, the director shall generally address sites in rank order according to the most current site list, unless he or she determines that it is appropriate to fund a site out of rank order, taking into consideration all of the following factors:

- (a) The availability of funding from other sources, such as private parties or federal programs.
- (b) The readiness of a site for response activity.

(c) Whether concerns for current or imminent human exposure to hazardous substances or for environmental or natural resource damage indicate that the site should be funded out of rank order.

(d) The need to continue response activities at sites which have previously been funded.

(e) The availability of personnel to carry out response activities.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5303 Evaluation of alternative funding options.

Rule 303. Before recommending sites for funding and before funding sites, the department may consider the availability of alternate funding, including monies from any of the following:

(a) Private parties.

(b) The federal hazardous substance superfund established by the internal revenue code of 1986, 26 U.S.C. §9507.

(c) The leaking underground storage tank trust fund established by the internal revenue code of 1986, 26 U.S.C. §9508.

(d) Other sources.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5305 Site eligibility for funding.

Rule 305. Any site which has been subjected to the risk assessment process described in section 6(b) of the act and part 8 of these rules is eligible for funding.

History: 1990 MR 6, Eff. July 12, 1990.

PART 4. ALTERNATE WATER SUPPLIES

R 299.5401 Definitions.

Rule 401. As used in this part:

(a) "Public notification" means a letter to a property owner or notification at a public meeting as defined in Act No. 267 of the Public Acts of 1976, as amended, being §15.261 et seq. of the Michigan Compiled Laws, and known as the open meetings act.

(b) "Treatment system" means a facility or structure and associated appurtenances that are installed for the purpose of treating drinking water before delivery in a distribution system.

(c) "Type I water supply" means a public water supply which provides year-round service to not less than 15 living units or which regularly provides year-round service to not less than 25 residents.

(d) "Water supply system" means a system of pipes and structures through which water is obtained and distributed for the purpose of furnishing water for drinking or household purposes, including all of the following:

(i) Wells and well structures.

(ii) Intakes and cribs.

(iii) Pumping stations.

(iv) Treatment plants.

(v) Storage tanks.

(vi) Pipelines and appurtenances.

(vii) A combination of the items specified in paragraphs (i) to (vi) of this subdivision.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5403 Department of public health approval of permanent alternate water supply; limitations on use of funds.

Rule 403. (1) When funds are used to provide a permanent alternate water supply, the new supply shall be approved by the department of public health pursuant to Act No. 399 of the Public Acts of 1976, as amended, being §325.1001 et seq. of the Michigan Compiled Laws.

(2) Money from the funds shall not be used to pay the cost of operation and maintenance of a permanent replacement water supply or treatment system or the cost of water supplied by such a system.

(3) Money from the funds shall not be used to pay for replacement of a water supply system unless the owner of that system has agreed in writing to plug the existing well or wells, if any, which are abandoned. Wells which are replaced shall be abandoned unless otherwise agreed by the department or the department of public health.

(4) Monies from the funds shall not be used to provide benefits such as alternate water supplies to persons whose actions or negligence caused a condition necessitating response activity.

(5) Monies from the funds shall not be used to provide an alternate water supply if, in the judgment of the department of public health, illegal construction of a well contributed to its contamination, except that illegal construction of a water supply well or wells shall not be the basis for withholding funding if, in the judgment of the department of public health, the well would have been contaminated even if it had been properly constructed.

(6) If either of the following criteria is met, then sufficient basis is established to conclude that an incident is the result of self-contamination and funding shall not be provided:

(a) Hydrogeological data support the conclusion that the contaminated supply resulted from self-contamination.

(b) The department determines that an off-site source of contamination is not or was not evident, a probable source of the hazardous substance in question is or was located at the site, and activities or practices are known to have occurred at the site in the proximity of the affected well which could have resulted in the contamination documented in the well.

(7) Money from the funds shall be used to provide a well or water supply connection to a property only when a drinking water well or connection to a public water supply exists at the time that public notice is given regarding provision of a permanent alternate water supply.

(8) Money from the funds shall not be used to pay the cost of an alternate water supply system at any site that is included on the site list as a result of nitrate contamination from a non-point source or from a private septic tank and tile field system.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5405 Conditions for provision of alternate water supplies.

Rule 405. (1) Individual water supply system replacements shall be provided from the funds only when the water supply proposed for replacement meets the criteria specified in both of the following provisions:

(a) The water supply is contaminated, or threatened by contamination, with a hazardous substance as defined by the act.

(b) The department of public health has issued an advisory against the use of the current drinking water supply or has concurred with an advisory issued by a local health department against use of the current water supply.

(2) All water supply replacements or treatment systems that are provided by the funds shall be installed in accordance with department of public health specifications.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5407 Use of the funds to address contamination of local government-owned type I water supplies.

Rule 407. (1) A project to address contamination of a local government-owned type I water supply system shall be eligible to receive money from the funds if both of the following criteria are met:

(a) There is a hazardous substance present in the water supply system or component as a result of environmental contamination and the department of public health has issued an advisory against the use of the system or component as a result of that contamination.

(b) The project to be funded under this subrule is designed to reduce or eliminate a threat to the public health caused by environmental contamination.

(2) Projects to address state or federally owned type I water supply systems are not eligible to receive monies from the funds.

(3) Money from the funds shall be used to pay 1/3 of the cost of a project which is approved by the department and which meets the criteria in subrule (1) of this rule, except as provided for in subrule (5) of this rule. Two-thirds of the cost of the project shall be paid by the local unit of government.

(4) Only locally generated funds shall be used for the local government share of the project costs. Federal or other funds shall not be used for the local government share.

(5) The total amount of money from the funds that is available to any local unit of government for projects approved by the department under subrule (1) of this rule shall not be more than \$500,000.00.

(6) Money from the funds shall not be used by a local unit of government for projects to investigate the source of groundwater contamination or to identify persons who are responsible for the water supply contamination.

(7) Monies expended by the local unit of government for activities completed before the approval by the department of a project under this rule shall not be eligible as the local government share of costs.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5409 Service area boundaries; establishment.

Rule 409. (1) Before the approval of funding by the department for extending or constructing a public water supply system, the department and the department of public health shall confer to determine the physical boundaries of the project service area.

(2) To the extent that information is available, boundaries shall be established considering all of the following minimum criteria:

(a) The extent of documented contamination.

(b) The nature, concentration, and mobility of the hazardous substances.

(c) The rate and direction of groundwater flow in the contaminated aquifer or aquifers.

(d) Whether the release of a hazardous substance has been controlled.

(e) If the project is an extension of water supply service, the attributes and limitations of the existing public water supply system.

(f) The probable impact of other remedial or control measures at the site, such as the shutdown of currently pumping wells and the effect of groundwater purge and treatment systems.

(3) The physical boundaries of the service area shall be established to protect water supply system owners from the current and projected impacts of the contaminated groundwater.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5411 Responsibilities of local governing entity.

Rule 411. (1) A public water supply construction or extension project shall not be funded unless the water supply owner has agreed, in writing, before fund authorization, to accept the responsibility for the ownership, operation, and maintenance of the proposed system.

(2) Monies from the funds shall not be used to support operation and maintenance costs for public water supply systems.

(3) It shall be the responsibility of the water supply owner to obtain all necessary permits for the construction or extension of the public water supply system.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5413 Distribution of monies from the funds for alternate water supplies; lowest-cost alternative.

Rule 413. (1) Monies from the funds for public or individual alternate water supplies shall be used only for a water supply that is acceptable to the department of public health. When more than 1 alternative is acceptable to the department of public health, funding will be limited to the cost of the lowest-cost acceptable alternative.

(2) Alternatives to be evaluated include all of the following:

(a) Well replacement.

(b) Water supply treatment.

(c) Connection to an existing water system.

(d) Construction of a public water system.

(3) If the local governing entity or affected property owner chooses to implement an acceptable alternative in accordance with the provisions of subrule (1) of this rule other than the lowest-cost alternative specified in subrule (1) of this rule, monies from the funds up to the value of the lowest-cost acceptable alternative may be provided.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5415 Notice to property owners in area to be served by public water supply system or extension.

Rule 415. (1) All property owners in an area proposed to be served by a public water supply system or an extension of such a system that is to be paid for with money from the funds shall be given written notice of the state's action. Such notice shall include an explanation of the proposed project, including a description of the project area and the services proposed to be provided to each property owner at state expense. The notice shall also explain that state funding of the proposed project is not contingent on any local

assessment, unless such an assessment is made to cover the local government cost share required by the provisions of R 299.5407(3).

(2) For the purposes of this rule, mailing of the required notice to the last known address of the property owner is sufficient notice.

History: 1990 MR 6, Eff. July 12, 1990.

PART 5. RESPONSE ACTIVITIES

R 299.5501 Objective.

Rule 501. (1) The principal objective of all response activities is to ensure prompt and adequate response to known sites of environmental contamination.

(2) To minimize impacts on the public health and the environment from hazardous substances, source control, abatement, or other interim response activities shall be undertaken when it is feasible and prudent, consistent with the provisions of R 299.5509.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5503 Determination of lead responsibility.

Rule 503. The director shall determine which division of the department shall take lead responsibility for securing appropriate response activity through enforcement activity or fund-financed activity, or both.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5505 Department request to potentially responsible parties to undertake response activities; department action.

Rule 505. (1) At any site where the department determines that there is a threat to the public health, safety, or welfare or to the environment or natural resources, the department may request that the potentially responsible party or parties, where identified, undertake appropriate response activities to abate, minimize, stabilize, mitigate, or eliminate the threat. Such response activities shall include any of the following activities, as appropriate:

- (a) Immediately stop the release at the source.
- (b) Immediately identify and eliminate any existing or potential threat of fire or explosion or any direct contact hazards.
- (c) Immediately initiate the removal of free product.
- (d) Identify, characterize, and provide a plan for the removal, treatment, or disposal of contaminated soils such that the requirements of part 7 of these rules will be met.
- (e) Complete investigative activities as directed by the department, consistent with R 299.5509.
- (f) Any other response activity determined by the department to be technically sound and necessary to protect the public health, safety, or welfare or the environment.
- (g) Submit a remedial action plan to the department for approval, consistent with the requirements of R 299.5513, which, when implemented, will achieve the cleanup criteria specified in part 7 of these rules. A plan submitted pursuant to the requirements of this subrule may provide for phased activities. A phased plan shall generally describe the total remedial action and shall provide a detailed description of activities in the phase or phases to be initially undertaken. A plan that is submitted pursuant to the requirements of this subrule shall include a schedule for implementation of remedial actions.

(h) Implement the plan described by subdivision (g) of this subrule after approval of the plan by the department and in accordance with the schedule approved by the department.

(2) Within 90 days after submittal of a plan requested by the department pursuant to the provisions of this part, the department shall inform the person submitting the plan whether the plan is acceptable.

(3) The department may take any appropriate action to abate, minimize, stabilize, mitigate, or eliminate the release of a hazardous substance or the potential release of a discarded hazardous substance when no potentially responsible party or parties have carried out the necessary activities in a timely manner.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5507 Emergency response; use of monies from the funds.

Rule 507. Monies from the funds may be used at any site where the department determines that there is a threat to the public health, safety, or welfare or the environment or natural resources and that immediate action is necessary to abate, minimize, stabilize, mitigate, or eliminate the release of a hazardous substance or the potential release of a discarded hazardous substance, consistent with the provisions of R 299.5305.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5509 Interim response activities.

Rule 509. (1) The department may request that interim response activity be undertaken when the conditions described in R 299.5501(2) are met and the interim response activity is consistent, to the extent practicable, with the likely remedial action at a site. All of the following factors shall be considered, when information is available, in determining the appropriateness of an interim response activity:

(a) Actual or potential exposure to hazardous substances of nearby populations, animals, or the food chain.

(b) Actual or potential contamination of drinking water supplies or sensitive ecosystems.

(c) The presence of discarded hazardous substances in drums, barrels, tanks, or other bulk storage containers that pose a threat of release.

(d) High levels of hazardous substances in soils largely at or near the surface that are likely to migrate.

(e) The likelihood that weather conditions will cause hazardous substances to migrate or be released.

(f) The threat of fire or explosion.

(g) The availability of other federal or state response mechanisms to respond to the release.

(h) Other factors which pose threats to the public health, safety, or welfare or to the environment.

(2) Interim response activities may include any of the following:

(a) Fences, warning signs, or other security or site control precautions where humans or animals have access to the release.

(b) Drainage controls where precipitation or runoff from other sources can enter the release area and spread hazardous substances.

(c) Stabilization of berms, dikes, or impoundments where needed to maintain the integrity of the structures.

(d) Capping of contaminated soils or sludges where needed to prevent the migration of hazardous substances into the environment.

(e) Using chemicals or other materials to retard the spread of a release or mitigate its effects.

(f) Removal of contaminated soils from drainage or other areas to reduce the spread of hazardous substances.

(g) Removal of drums, barrels, tanks, or other bulk storage containers that contain hazardous substances where it will reduce the likelihood of any of the following:

(i) Spillage.

(ii) Leakage.

(iii) Exposure to humans, animals, or the food chain.

(iv) Fire or explosion.

(h) Groundwater control or removal systems.

(i) Provision of an alternate water supply where it will reduce the risk to humans or animals from contaminated water.

(j) Temporary evacuation where necessary to protect the public health, safety, or welfare where imminent and substantial endangerment has been identified.

(k) Other measures judged by the department to be technically sound and necessary to protect the public health, safety, or welfare, the environment, or natural resources.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5511 Remedial investigation.

Rule 511. (1) The department may request that a remedial investigation be conducted, consistent with this part and sufficient to support determinations pursuant to parts 6 and 7 of these rules, at any site where response activities are to be undertaken.

(2) The department may request the preparation and approval of a remedial investigation plan before the initiation of a remedial investigation.

(3) A remedial investigation plan prepared, or remedial investigation conducted, pursuant to this rule shall address the following factors, as appropriate to the site:

(a) The nature and extent of contamination at the site.

(b) Risks to the public health, safety, and welfare and to the environment and natural resources.

(c) Routes of exposure.

(d) All of the following with respect to hazardous substances that are present:

(i) Amount.

(ii) Concentration.

(iii) Hazardous properties.

(iv) Environmental fate.

(v) Bioaccumulative properties.

(vi) Persistence.

(vii) Mobility.

(viii) Form.

(e) All of the following with respect to the physical setting of the site:

(i) Geology.

- (ii) Hydrology.
- (iii) Hydrogeology.
- (iv) Depth to saturated zone.
- (v) Hydrologic gradients.
- (vi) Proximity to drinking water aquifers.
- (vii) Proximity to surface water.
- (viii) Proximity to floodplains.
- (ix) Proximity to wetlands.
- (f) Current and potential groundwater use.
- (g) Climate.
- (h) Source identification and characterization.
- (i) Whether substances at the site can be reused or recycled.
- (j) The likelihood of future releases if the substances remain on-site.
- (k) The extent to which natural or human-made barriers currently contain the substances and the adequacy of the barriers.
- (l) The extent to which the substances have migrated or are expected to migrate from the area of release.
- (m) The extent and impact of future migration of the substances.
- (n) An assessment of natural resource damage resulting from the release.
- (o) Contribution of the substances to contamination of the air, land, water, or food chain.
- (p) Legally applicable or relevant and appropriate state and federal cleanup requirements.
- (q) Sampling design and rationale for parameter selection.
- (r) A description of monitoring well construction.
- (s) A description of, and rationale for, any geophysical techniques used in the investigation. The data from geophysical testing shall be made available to the department on request.
- (t) Sample collection and preparation procedures.
- (u) Identification of the laboratory or laboratories responsible for sample analysis.
- (v) Laboratory methods used to generate all remedial investigation data, including method detection limits. The data used to determine method detection limits shall be made available to the department on request.
- (w) Other matters appropriate to the site. Department requests for information pursuant to this subdivision shall be limited to factors not adequately addressed by information required by the provisions of other subdivisions of this rule and shall be accompanied by an explanation of the need for such additional information.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5513 Feasibility studies.

Rule 513. (1) The department may request that a feasibility study be conducted at a site where final response activities are to be undertaken.

(2) The feasibility study conducted pursuant to subrule (1) of this rule shall include the following factors, as appropriate to the site:

- (a) Development of alternative final remedies in each of the following categories:

(i) Alternatives for the treatment, disposal, waste minimization, recycling or destruction at an off-site facility.

(ii) Alternatives for the treatment, disposal, waste minimization, recycling, or destruction at an on-site facility.

(iii) No action alternative.

(b) Development of alternative final remedies that provide for a reduction in risk that is sufficient to meet the criteria set forth in part 7 of these rules.

(3) An initial screening of alternatives to narrow the list of potential remedies for detailed evaluation in the feasibility study shall be conducted using all of the following broad criteria:

(a) The effectiveness in meeting the cleanup criteria of part 7 of these rules to protect the public health, safety, welfare or the environment.

(b) Cost of the remedial action.

(c) Acceptable engineering practices based on all of the following criteria:

(i) Feasibility for the location and conditions of release.

(ii) Applicability to the problem.

(iii) Reliability.

(4) A detailed evaluation of the alternatives that will remain after initial screening is conducted. The detailed analysis of each alternative shall, as appropriate, include the following:

(a) Assessment of the effectiveness of the alternative in protecting the public health, safety, or welfare or the environment.

(b) Refinement and specification of alternatives in detail.

(c) Detailed cost estimation, including operation and maintenance costs, distributed over time, of implementing the final remedy.

(d) Evaluation in terms of engineering implementation, reliability, and constructability.

(e) Evaluation of technical feasibility.

(f) Analysis of whether recycling, reuse, waste minimization, waste biodegradation, waste destruction, or other advanced, innovative, or alternative technologies are appropriate.

(g) An analysis of any adverse environmental impacts, methods of mitigation, and costs of mitigation.

(h) Analysis of the risks remaining after implementation of the remedy.

(i) Analysis of the extent to which the alternative attains or exceeds legally applicable or relevant and appropriate federal and state public health and environmental requirements.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5515 Remedial action plan.

Rule 515. (1) The department may request that a remedial action plan be developed for any remedial action undertaken pursuant to the provisions of these rules and be submitted to the department for approval. Such a plan shall include all of the following:

(a) A description of the remedial action to be implemented, including an explanation of how that action will meet the requirements of part 7 of these rules. The remedial action plan shall also include an analysis of the selection of indicator chemicals to be used in evaluating the implementation of the remedial action plan, if indicator chemicals are to be used. The remedial action plan shall include a description of ambient air quality

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monitoring activities to be undertaken during the remedial action, if such activities are appropriate during implementation of the remedial action.

(b) An operation and maintenance plan, if one is required pursuant to the provisions of R 299.5517.

(c) A monitoring plan, if one is required pursuant to the provisions of R 299.5519.

(d) An explanation of any land use restrictions imposed at the site, if such restrictions are required pursuant to the provisions of R 299.5719, and a plan for the monitoring and enforcement of such restrictions.

(e) A schedule for implementation of the remedial action plan.

(2) Remedial action plans shall be modified to address all of the following:

(a) Unanticipated site conditions.

(b) A change in site conditions.

(c) Proposed changes in any element described in subrule (1) of this rule.

(3) Proposed changes in the remedial action plan shall be submitted to the department. The department shall review and approve proposed modifications to the remedial action plan if they are consistent with the provisions of parts 5, 6, and 7 of these rules.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5517 Operation and maintenance plan.

Rule 517. (1) The department may request that an operation and maintenance plan be prepared for all response activities and be submitted to the department for approval.

(2) The operation and maintenance plan shall include all of the following:

(a) Name, phone number, and address of the person who is responsible for operation and maintenance.

(b) Operation and maintenance schedule.

(c) Written and pictorial plan of operation and maintenance.

(d) Design and construction plans.

(e) Equipment diagrams, specifications, and manufacturers' guidelines.

(f) Safety plan.

(g) Emergency plan, including emergency contact phone numbers.

(h) A list of spare parts available for emergency repairs.

(i) Other information required by the department to determine the adequacy of the operation and maintenance plan. Department requests for information pursuant to this subdivision shall be limited to factors not adequately addressed by information required by the provisions of other subdivisions of this rule and shall be accompanied by an explanation of the need for such additional information.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5519 Monitoring requirements.

Rule 519. (1) The department may request that monitoring of response activities be conducted to determine any of the following:

(a) The effectiveness of the response activities in protecting the public health, safety, and welfare and the environment and natural resources.

(b) The effectiveness of the response activities in minimizing, mitigating, or removing environmental contamination at a site.

(c) The cost effectiveness of the response activities.

(2) The department may request that a monitoring plan be prepared. The plan shall contain all of the following:

- (a) Location of monitoring points.
- (b) Environmental media to be monitored, such as soil, air, water, or biota.
- (c) Monitoring schedule.
- (d) Monitoring methodology, including sample collection procedures.
- (e) Substances to be monitored, including an explanation of the selection of any indicator chemicals to be used.
- (f) Laboratory methodology, including the name of the laboratory responsible for analysis of monitoring samples, method detection limits, and practical quantitation levels. Raw data used to determine method detection limits shall be made available to the department on request.
- (g) Quality control/quality assurance plan.
- (h) Data presentation and evaluation plan.
- (i) Contingency plan to address ineffective monitoring.
- (j) Operation and maintenance plan for monitoring.
- (k) How the monitoring data will be used to demonstrate effectiveness of response activities.
- (l) Other elements required by the department to determine the adequacy of the monitoring plan. Department requests for information pursuant to this subdivision shall be limited to factors not adequately addressed by information required by the provisions of other subdivisions of this rule and shall be accompanied by an explanation of the need for such additional information.

History: 1990 MR 6, Eff. July 12, 1990.

PART 6. SELECTION OF REMEDIAL ACTION

R 299.5601 Degree of cleanup; compliance with state and federal requirements; cost.

Rule 601. (1) All remedial actions carried out under these rules shall achieve a degree of cleanup which is protective of the public health, safety, and welfare and the environment and natural resources.

(2) Remedial actions shall meet legally applicable or relevant and appropriate state and federal requirements.

(3) The cost of a remedial action shall be a factor only in choosing among alternatives which adequately protect the public health, safety, welfare and the environment and natural resources, consistent with the requirements of part 7 of these rules.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5603 Evaluation of remedial action alternatives.

Rule 603. (1) In assessing remedial action alternatives, the department shall consider all of the following:

- (a) The effectiveness of alternatives in protecting the public health, safety, and welfare and the environment and natural resources.
- (b) The long-term uncertainties associated with the proposed remedial action.
- (c) The goals, objectives, and requirements of Act No. 641 of the Public Acts of 1978, as amended, being §299.401 et seq. of the Michigan Compiled Laws, and known as the

solid waste management act, and Act No. 64 of the Public Acts of 1979, as amended, being §299.501 et seq. of the Michigan Compiled Laws, and known as the hazardous waste management act.

(d) The persistence, toxicity, mobility, and propensity to bioaccumulate of the hazardous substances.

(e) The short and long-term potential for adverse health effects from human exposure.

(f) Costs of remedial action, including long-term maintenance costs, except that costs shall only be considered as specified in R 299.5601(3).

(g) Reliability of the alternatives.

(h) The potential for future remedial action costs if an alternative fails.

(i) The potential threat to human health, safety, and welfare and the environment and natural resources associated with excavation, transportation, and redisposal or containment.

(j) The ability to monitor remedial performance.

(k) The public's perspective about the extent to which the proposed plan effectively addresses criteria specified in these rules.

(2) Remedial actions that permanently and significantly reduce the volume, toxicity, or mobility of the hazardous substances are to be preferred.

(3) The off-site transport and disposal of hazardous substances or contaminated materials without treatment shall be the least favored remedial action alternative where practicable treatment technologies are available.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5605 Public participation.

Rule 605. (1) Before approval of a proposed plan for remedial action at any site where monies from the funds are to be used, where type C criteria are being proposed, or where the director determines that there is significant public interest, the department shall do all of the following:

(a) Publish a notice and brief analysis of the recommended alternative. For purposes of this subrule, publication shall include, at a minimum, publication in a major local newspaper of general circulation. In addition, each item developed, received, published, or made available to the public shall be available for public inspection at or near the site at issue.

(b) Make the feasibility study which outlines alternative remedial measures available to the public for review and comment for a period of not less than 30 calendar days.

(c) Provide an opportunity for a public meeting at or near the site at issue regarding the possible remedial alternatives.

(d) Prepare a document which summarizes the major issues raised by the public and how they are to be addressed by the final approved plan.

(2) Notice of the remedial action selected or approved shall be published and the plan for the remedial action shall be made available to the public before commencement of any remedial action. The plan shall be accompanied by both of the following:

(a) A discussion of any significant changes in the proposed plan.

(b) A response to each of the significant comments, criticisms, and new data submitted as a result of the process described in subrule (1) of this rule.

(3) The department may provide an opportunity for public comment and review on any interim response activity to be undertaken by the state.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5607 Administrative record.

Rule 607. (1) The department shall compile an administrative record of the decision process leading to the selection of any final remedial action. The administrative record shall contain the following, as applicable:

- (a) Remedial investigation data.
- (b) The feasibility study and potential alternative actions.
- (c) Public comments received, if any, and an explanation of how significant concerns are to be addressed.
- (d) For remedial actions which have been completed in accordance with an approved remedial action plan, documentation prepared pursuant to the provisions of subrule (4) of this rule.

(e) Other information appropriate to the site.

(2) If neither a remedial investigation nor a feasibility study was conducted for a site subject to the requirements of R 299.5605, the department shall include, in the administrative record, an explanation of the basis for that decision.

(3) The department shall prepare a summary document which explains its decision regarding a remedial action plan which is subject to the requirements of R 299.5605.

(4) Upon a determination by the department that a person has completed all response activity at a site pursuant to an approved remedial action plan prepared and implemented in compliance with these rules, the department, upon request, shall execute a document stating that all response activities required in the approved remedial action plan have been completed.

History: 1990 MR 6, Eff. July 12, 1990.

PART 7. CLEANUP CRITERIA

R 299.5701 Definitions; A to I.

Rule 701. As used in this part:

(a) "Acceptable daily intake" or "ADI" means an estimate of the maximum daily dose of a toxicant expressed in milligrams per kilogram body weight per day which is not expected to result in adverse effects after lifetime exposure to the general human population, including sensitive subgroups.

(b) "Acute toxicity" means the ability of a chemical to cause a debilitating or injurious change in an organism which results from a single or short-term exposure to the chemical.

(c) "Background" means the concentration or level of a hazardous substance which exists in the environment at or regionally proximate to a site that is not attributable to any release at or regionally proximate to the site.

(d) "Best available information" means data which serves as the basis for a risk assessment. Such information may be taken from the scientific literature or the integrated risk information system database maintained by the United States environmental protection agency or from other databases, as appropriate. The term includes other pertinent studies or reports containing data which the department finds to be of adequate quality for use in the risk assessment.

(e) "Carcinogen" means any of the following:

(i) Group A — any substance for which there is sufficient evidence from human epidemiological studies to support a causal association between exposure to the agent and cancer.

(ii) Group B — any substance for which the weight of evidence of human carcinogenicity based on epidemiological studies is limited evidence or for which the weight of evidence of carcinogenicity based on animal studies is sufficient evidence.

(iii) Group C — any substance for which there is limited evidence of carcinogenicity in animals in the absence of human data and which causes a significant increased incidence of benign or malignant tumors in a single, well-conducted animal bioassay.

(f) "Chronic toxicity" means the ability of a chemical to cause an injurious or debilitating effect in an organism which results from repeated exposure to a chemical for a time period representing a substantial portion of the natural life expectancy of that organism.

(g) "Discarded hazardous substance" means a hazardous substance which has been disposed of or is not being properly managed in accordance with all applicable statutes and rules.

(h) "Genotoxic teratogen" means a substance which meets all of the following criteria:

(i) Is positive in tests for gene mutation, with or without metabolic activation.

(ii) It or its genotoxic metabolites are placentally transferred in a mammalian species through oral, dermal, or inhalation exposure.

(iii) It elicits a teratogenic response when administered orally, dermally, or by inhalation in at least 1 mammalian species.

(i) "Germ line mutagen" means a substance which has the ability to cause heritable change in the genome of the germinal cells through oral, dermal, or inhalation exposure in at least 1 mammalian species.

(j) "Human life cycle safe concentration (HLSC)" means the highest concentration of a chemical acting by a threshold mechanism to which humans are exposed continuously for a lifetime and which is not expected to result in observed adverse effects to any individual or progeny, expressed as a concentration in water. An HLSC may be based on a reference dose from the United States environmental protection agency.

(k) "Increased cancer risk of 1 in 1,000,000" means the 95% upper bound on the calculated risk of 1 additional cancer above the background cancer rate per 1,000,000 individuals continuously exposed to a carcinogen at a given average daily dose for a 70-year lifetime.

(l) "Institutional control" means a measure undertaken to limit or prohibit certain activities that may interfere with the integrity of a remedial action or result in exposure to hazardous substances at a site.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5703 Definitions; L to W.

Rule 703. As used in this part:

(a) "LD₅₀" means the dose of a chemical which is expected to cause death in 50% of the test animals.

(b) "Leachate" means liquid, including any suspended components in the liquid, that has percolated through or drained from a hazardous substance or soil contaminated with a hazardous substance.

(c) "Limited evidence," a term of art, means either of the following:

(i) In human epidemiological studies, the data indicate that a causal relationship between the agent and human cancer is credible, but that alternative explanations such as chance, bias, or confounding variables could not be adequately excluded.

(ii) In animal studies, data suggest a carcinogenic effect, but are limited because of any of the following:

(A) The studies involve a single species, strain, or experiment and do not meet criteria for sufficient evidence.

(B) The experiments are restricted by any of the following:

(1) Inadequate dosage levels.

(2) Inadequate duration or exposure to the agent.

(3) Inadequate period of follow-up.

(4) Poor survival.

(5) Too few animals.

(6) Inadequate reporting.

(C) The data show an increase in the incidence of benign tumors only.

(d) "Linearized multistage model" means a dose-response model which assumes that there are a number of distinct biological stages or changes that must occur for a normal cell to be transformed into a tumor and which assumes the dose-response relationship to be linear at low doses.

(e) "Maximum contaminant level" means the United States environmental protection agency's maximum contaminant level for public water supply systems as set forth in the provisions of 40 C.F.R. part 141 (revised as of July 1, 1988), which are herein adopted by reference, and which are available for inspection at the Lansing office of the department. Copies of the provisions may be purchased, at a cost of \$25.00, from the Superintendent of Documents, Government Printing Office, Washington, DC 20402, or from the Department of Natural Resources, Environmental Response Division, Post Office Box 30028, Lansing, Michigan 48909, at cost.

(f) "Method detection limit" means the minimum concentration of a substance which can be measured and reported, with 99% confidence, that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix that contains the analyte.

(g) "Multistage coefficient" means a maximum likelihood estimate of a coefficient of the polynomial which is generated by the multistage model.

(h) "NOAEL" means the highest level of toxicant which results in no observable adverse effects in exposed test organisms.

(i) "Practical quantitation level" means the lowest level that can be reliably achieved within specified limits of precision and accuracy under routine laboratory conditions and based on quantitation, precision and accuracy, normal operation of the laboratory, and the practical need in a compliance monitoring program to have a sufficient number of laboratories available to conduct the analyses.

(j) "Reference dose" or "RfD" means a conservative estimate of the daily exposure to the human population, including sensitive subgroups, that is likely to be without appreciable risk of deleterious effect during a lifetime. The reference dose is expressed in units of milligrams per kilogram body weight per day.

(k) "Risk" means the probability that a chemical, when released into the environment, will cause an adverse effect in exposed humans, other living organisms, or abiotic environmental compartments.

(l) "Risk assessment" means the analytical process used to determine the level of risk.

(m) "Secondary maximum contaminant level" means the United States environmental protection agency's secondary maximum contaminant level for protection of the public welfare for substances which may adversely affect the taste, odor, color, appearance, or any aesthetic quality of drinking water, as set forth in the provisions of 40 C.F.R. part 143 (revised as of July 1, 1988), which are herein adopted by reference and which are available for inspection at the Lansing office of the department. Copies of the provisions may be purchased, at a cost of \$25.00, from the Superintendent of Documents, Government Printing Office, Washington, DC 20402, or from the Department of Natural Resources, Environmental Response Division, Post Office Box 30028, Lansing, Michigan 48909, at cost.

(n) "Sufficient evidence," a term of art, means either of the following:

(i) In human epidemiological studies, that the data indicate that there is a causal relationship between the agent and human cancer.

(ii) In animal studies, the data suggest that there is an increased incidence of malignant tumors or combined malignant and benign tumors in any of the following:

(A) Multiple species or strains.

(B) Multiple experiments.

(C) To an unusual degree in a single experiment with regard to high incidence, unusual site or type of tumor, or early age at onset.

(o) "Toxicological interaction" means simultaneous exposure to 2 or more hazardous substances which will produce a toxicological response that is greater or less than their individual responses.

(p) "Type A" means the degree of cleanup which reduces hazardous substance concentrations such that those concentrations do not exceed background or method detection limits for a hazardous substance, consistent with the provisions of R 299.5707.

(q) "Type B" means the degree of cleanup which provides for hazardous substance concentrations that do not pose an unacceptable risk on the basis of standardized exposure assumptions and acceptable risk levels described in the provisions of R 299.5709 to R 299.5715.

(r) "Type C" means the degree of cleanup which provides for hazardous substance concentrations that do not pose an unacceptable risk, considering a site-specific assessment of risk as provided for in R 299.5717.

(s) "Weight of evidence," a term of art, means a description of the likelihood that a chemical is a human carcinogen based on evaluation of tumor data from human or animal studies and examination of relevant supporting information, including any of the following information:

(i) Structure-activity relationships.

(ii) Short-term test findings.

(iii) Results of appropriate physiological, biological, and toxicological observations.

(iv) Comparative metabolism and pharmacokinetic studies.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5705 Remedial actions; protection of public health and environment required; degree of cleanup; combination of types; review and approval of proposed type; type modification during implementation; aquifers; unacceptability of remedial action plan.

Rule 705. (1) All remedial actions shall be protective of the public health, safety, and welfare and the environment and natural resources.

(2) Removal, treatment, or containment measures shall be implemented to attain 1 or more of the following degrees of cleanup:

- (a) Type A.
- (b) Type B.
- (c) Type C.

(3) A combination of types may be used at a single site to develop an acceptable remedial action.

(4) The remedial action type proposed shall be at the option of the person proposing the remedial action. The department shall approve of a remedial action plan that provides for a remedy which meets the applicable criteria set forth in this part and parts 5 and 6 of these rules. Approval shall be granted for type A, type B, or type C plans, or for plans which involve a combination of types, if all applicable requirements are satisfied.

(a) The remedial action type or types may be modified during implementation of a remedial action, consistent with the provisions of R 299.5515(2).

(5) The horizontal and vertical extent of hazardous substance concentrations in an aquifer above the higher of either the concentration allowed by R 299.5707 or the concentration allowed by R 299.5709 shall not increase after the initiation of remedial actions to address an aquifer, except as approved by the director.

(6) All remedial actions which address the remediation of an aquifer shall provide for removal of the hazardous substance or substances from the aquifer, either through active remediation or as a result of naturally occurring biological or chemical processes which can be documented to occur at the site.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5707 Compliance with type A criteria for all environmental media.

Rule 707. Compliance with type A criteria shall be attained when either of the following conditions is met for a specified hazardous substance in any environmental media, consistent with the provisions of R 299.5721:

- (a) The hazardous substance concentration does not exceed background.
- (b) The hazardous substance concentration does not exceed the method detection limit for the substance in question.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5709 Compliance with type B criteria for groundwater in aquifers.

Rule 709. (1) Compliance with type B criteria shall be attained when the conditions specified in subrule (2) of this rule are met, consistent with the provisions of R 299.5721.

(2) The concentration of a hazardous substance in an aquifer shall not exceed the lowest of the following:

(a) For a carcinogen acting by a threshold or a nonthreshold mechanism, the concentration which represents an increased cancer risk of 1 in 1,000,000 calculated according to the procedures in R 299.5723.

(b) For a hazardous substance which is not a carcinogen, a genotoxic teratogen, or a germ line mutagen, the concentration which represents the human life cycle safe concentration calculated according to the procedures in R 299.5725, except as provided for in subdivision (c) or (d) of this subrule.

(c) For a hazardous substance which has a secondary maximum contaminant level, that level.

(d) For a hazardous substance which, singly or in combination with other hazardous substances present at the site, imparts adverse aesthetic characteristics to groundwater, the concentration which is documented as the taste or odor threshold or the concentration below which appearance or other aesthetic characteristics are not adversely affected. The criteria of this subdivision shall apply only when the level required by this subdivision is less than the level required by subdivision (a) or (b) of this subrule. A taste or odor threshold concentration or a concentration adversely affecting appearance shall be determined according to methods approved by the United States environmental protection agency.

(3) For the purposes of this rule, the point of exposure shall be presumed to be any point in the affected aquifer.

(4) Groundwater that is not in an aquifer shall be addressed by application of type B soil cleanup criteria as specified in R 299.5711 or by a type C remedial action. If groundwater that is not in an aquifer transports a hazardous substance into an aquifer in a concentration greater than permitted by the provisions of R 299.5707 or R 299.5709, that groundwater is subject to the provisions in subrules (1) to (3) of this rule.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5711 Compliance with type B criteria for soils.

Rule 711. (1) Compliance with type B criteria shall be attained when hazardous substance concentrations in soil do not exceed any of the following in migration pathways pertinent to the site, except as provided for in subrule (8) of this rule:

(a) Levels required to protect aquifers from the effects of contaminants in soil, as set forth in subrule (2) of this rule. All type B remedial actions shall consider migration to an aquifer as a pertinent pathway.

(b) Levels required to protect surface water from the effects of contaminants in soil, as set forth in subrule (3) of this rule.

(c) Levels required to protect against unacceptable risk through the inhalation of contaminants in, or released from, soil, as set forth in subrule (4) of this rule.

(d) Levels required to protect against unacceptable risk through direct human contact with contaminants in soil, as set forth in subrule (5) of this rule.

(e) Levels required to protect direct uses of the soil resource, if information is available to establish such levels, as set forth in subrule (6) of this rule.

(2) To assure that soils do not pose a threat of aquifer contamination, the concentration of the hazardous substance in soil shall be below that which produces a concentration in leachate that is equal to the highest of the groundwater criteria specified in R 299.5707, the groundwater criteria specified in R 299.5709, or the leachate concentration generated by background soil. Leachate testing shall not be required to demonstrate compliance with this subrule if the total concentration of a hazardous substance in soil does not exceed 20 times the criteria specified by R 299.5707 or R 299.5709. Leachate concentrations shall be determined by a method which best represents in-situ conditions. For the purposes of this rule, the following test methods shall be acceptable:

(a) The United States environmental protection agency's toxicity characteristic leaching procedure (TCLP) as set forth in the provisions of 40 C.F.R. part 261, appendix II (revised as of March 29, 1990), which are herein adopted by reference and which are available for inspection at the Lansing office of the department. Copies of the provisions may be purchased at a cost of \$24.00 from the Superintendent of Documents, Government Printing Office, Washington, DC 20402, or from the Department of Natural

Resources, Environmental Response Division, Post Office Box 30028, Lansing, Michigan 48909, at cost.

(b) Other test methods accepted by the department to more accurately simulate conditions at the site than the test methods specified in subdivision (a) of this subrule.

(3) To assure the protection of surface waters from transport or runoff of contaminated soil into surface waters, measures shall be implemented to prevent the transport of contaminated soil into surface waters which would result in hazardous substance levels that exceed relevant water quality standards specified in Act No. 245 of the Public Acts of 1929, as amended, being §323.1 et seq. of the Michigan Compiled Laws, or rules promulgated pursuant to that act, except that no mixing zone shall apply.

(4) To assure that unacceptable risks do not result from the inhalation of hazardous substances in or emanating from soil, hazardous substance concentrations shall not result in an air emission that causes an increased cancer risk of 1 in 1,000,000 or a concentration that causes, alone or through reaction with other air contaminants, injurious effects to human health, safety, or welfare; animal life; plant life of significant value; or to property.

(5) To assure that unacceptable risks do not result from direct contact with contaminated soils, hazardous substance concentrations in soil shall not exceed the concentration determined by the following algorithm:

$$C_s = \frac{\text{Target dose (mg/kg/d)} \times \text{WH} \times 1000 \text{ ug/mg}}{(\text{ID (g/day)} \times \text{AEI}) + (\text{DD (g/day)} \times \text{AED})}$$

Where:

C_s = acceptable exposure concentration, in parts per million

$$\text{Target dose} = \frac{0.000001}{q_1^*} \text{ (carcinogens)}$$

Target dose (non-carcinogens) = $RfD \times 0.2$ or $MgT \times 0.2$

WH = 70 kilograms (assumed human weight)

ID = 0.09 grams per day (assumed ingested dose)

DD = 0.9 grams per day (assumed dermal contact dose)

AEI = known or assumed absorption efficiency via ingestion, determined according to the criteria specified in this subrule.

AED = known or assumed absorption efficiency via dermal contact, determined according to the criteria specified in this subrule.

and where:

q_1^* = cancer potency value for the hazardous substance and route of exposure being evaluated, based on best available information.

RfD = reference dose, based on best available information.

MgT = milligrams toxicant per day divided by 70 kilograms. Milligrams toxicant per day shall be calculated by the procedures specified in R 299.5725.

When chemical-specific data are not available, the absorption efficiency applicable to ingestion shall be either 100% for a volatile organic chemical or 50% for other organic chemicals, polychlorinated biphenyls, a pesticide, or an inorganic parameter. When chemical-specific data are not available, the absorption efficiency applicable to dermal contact shall be either 10% for a volatile organic chemical or 1% for other organic chemicals, polychlorinated biphenyls, a pesticide, or an inorganic parameter.

(6) To assure that hazardous substances in soil do not pose other unacceptable risks, the concentration of a hazardous substance in soil shall meet cleanup criteria based on sound scientific principles and determined by the director to be necessary to protect the public health, safety, and welfare and environment and natural resources from any of the following:

(a) Food chain contamination.

(b) Damage to soil or biota in the soil which would impair the use of such soil for agricultural purposes.

(c) Phytotoxicity.

(d) Physical hazards.

(e) Nonsystemic or acute toxic effects.

(f) Other injury which requires consideration.

(7) For the purposes of this rule, the point of exposure shall be assumed to be any location at the site or any location to which hazardous substances in, or emanating from, soil are transported by runoff, air dispersion, or other natural forces.

(8) In determining the adequacy of a type B response activity to address soils contaminated by polychlorinated biphenyls, the department shall not require response activity in addition to response activity which is subject to and complies with applicable federal regulations and policies that implement the toxic substance control act, 15 U.S.C. §2601 et seq. This subrule shall apply only to cleanups conducted in immediate response to a spill of polychlorinated biphenyls and shall not apply to pervasive or historical environmental contamination that involves polychlorinated biphenyls.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5713 Compliance with type B criteria for surface water.

Rule 713. (1) Compliance with type B criteria shall be attained when the conditions specified in subrule (2) of this rule are met.

(2) Hazardous substance concentrations in groundwater shall not result in a natural discharge of groundwater to surface water that exceeds the limits which would apply if that discharge were otherwise subject to a permit pursuant to the provisions of Act No. 245 of the Public Acts of 1929, as amended, being §323.1 et seq. of the Michigan Compiled Laws, or rules promulgated pursuant to that act, except that no mixing zone shall apply.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5715 Compliance with type B criteria for air quality.

Rule 715. (1) Compliance with type B criteria shall be attained when the conditions of subrule (2) of this rule are met.

(2) Hazardous substance concentrations shall not produce any emission which results in a violation of the provisions of Act No. 348 of the Public Acts of 1965, as amended, being §336.11 et seq. of the Michigan Compiled Laws, and known as the air pollution act, or the rules promulgated pursuant to that act.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5717 Compliance with type C criteria, all environmental media.

Rule 717. (1) Compliance with type C criteria shall be attained when a remedial action that includes type C elements has been fully implemented in accordance with an approved remedial action plan pursuant to the provisions of R 299.5515.

(2) Type C criteria shall be developed on the basis of a site-specific risk assessment, taking into account the following factors:

(a) The party who proposes the type C remedial action shall demonstrate that the proposed criteria are appropriate for the site being considered.

(b) Type C criteria shall take into account reasonably foreseeable uses of the site and natural resources in question.

(c) Type C remedial actions shall take into account cost effectiveness.

(3) The party who proposes a type C remedial action shall provide information about, and the department shall consider, all of the following factors as appropriate to the site in question:

(a) Potential exposure of human and natural resource targets.

(b) Environmental media affected by contamination.

(c) All of the following with respect to the physical setting of the site:

(i) Geology.

(ii) Hydrology.

(iii) Soils.

(iv) Hydrogeology.

(v) Other aspects of the physical setting which have a bearing on the appropriateness of the proposed plan.

(d) Background groundwater, surface water, and air quality at the site.

(e) Current and reasonably foreseeable natural resource use.

(f) Potential pathways of hazardous substance migration.

(g) All of the following with respect to hazardous substances at the site:

(i) Amount.

(ii) Concentration.

(iii) Form.

(iv) Mobility.

(v) Persistence.

(vi) Bioaccumulative properties.

(vii) Environmental fate.

(viii) Other characteristics of the hazardous substances which have a bearing on the appropriateness of the proposed plan.

(h) The extent to which the hazardous substances have migrated or are expected to migrate from the area of release.

(i) The impact of future migration of the hazardous substances.

(j) Current or potential contribution of the hazardous substances to food chain contamination.

(k) Climate.

(l) The technical feasibility and cost-effectiveness of remedial action alternatives, including alternatives which comply with type B criteria.

(m) The evaluation of remedial action alternatives required by the provisions of R 299.5603.

(n) The uncertainties of the risk assessment.

(o) The ability to monitor remedial performance, including the limitations of analytical methods.

(p) For remedial action plans which may impact the Great Lakes, consistency with the Great Lakes water quality agreement of 1978, as amended by protocol signed November 18, 1987, and the Great Lakes toxic substances control agreement of 1986.

(q) Other factors appropriate to the site. Department requests for information pursuant to this subdivision shall be limited to factors not adequately addressed by information required by the provisions of other subdivisions of this rule and shall be accompanied by an explanation of the need for such additional information.

(4) Any remedial action which must address a genotoxic teratogen or a germ line mutagen, or both, shall use criteria established by the department on a chemical-specific basis. In determining criteria for these materials, a committee of scientists who are expert in the fields of germ line mutagens and genotoxic teratogens shall be established by the director, as needed. The department shall, as necessary, seek the advice of the committee regarding the mutagenic potential of a hazardous substance or the potential of a hazardous substance to act as a genotoxic teratogen.

(5) Any remedial action plan to address surface water or sediments shall include cleanup criteria established by the department on the basis of sound scientific principles considering the need to eliminate or mitigate the following use impairments, as appropriate to the site in question:

(a) Restrictions on fish or wildlife consumption.

(b) Degraded fish or wildlife populations.

(c) Fish tumors or other deformities.

(d) Bird or animal deformities or reproductive problems.

(e) Degradation of benthos.

(f) Restrictions on dredging activities.

(g) Eutrophication or undesirable algae.

(h) Restrictions on drinking water consumption or taste or odor problems.

(i) Beach closings.

(j) Degradation of aesthetics.

(k) Degradation of phytoplankton or zooplankton populations.

(l) Loss of fish or wildlife habitat.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5719 Additional requirements for certain type C remedial actions.

Rule 719. (1) Any remedial action plan which involves on-site containment of a hazardous substance as a part of the remedy shall include provisions for the long-term monitoring of the site to assure the effectiveness and integrity of the remedial action.

(2) If a remedial action which involves on-site containment of a hazardous substance as a part of the remedy is being undertaken by a responsible party, long-term monitoring,

land use restrictions, and continued financial responsibility, if appropriate, shall be stipulated in a legally enforceable agreement with the department. The responsible party shall, through a financial mechanism acceptable to the department, provide funding to pay for monitoring, operation and maintenance, oversight, and other costs necessary to assure the effectiveness and integrity of the containment measures.

(3) If a remedial action relies on land use restrictions or other institutional controls to prohibit exposures which could result in unacceptable risk, such restrictions shall be described in a restrictive covenant that is executed by the property owner and recorded with the register of deeds for the county in which the site is located. Such restrictions shall run with the land and be binding on the owner's successors and assigns. The restrictive covenant shall be subject to approval by the state and shall include provisions to accomplish all of the following:

(a) Prohibit activities on the site that may interfere with a remedial action, operation and maintenance, long-term monitoring, or other measures necessary to assure the integrity of the remedial action.

(b) Prohibit activities that may result in human exposures above those specified by the provisions of R 299.5709 to R 299.5715 or that would result in the release of a hazardous substance which was contained as part of the remedial action.

(c) Require notice to the department of the owner's intent to convey any interest in the site. A conveyance of title, an easement, or other interest in the property shall not be consummated by the property owner without adequate and complete provision for the continued operation and maintenance of the remedy and the prevention of releases and exposures described in the provisions of subdivision (b) of this subrule.

(d) Grant to the department and its designated representatives the right to enter the property at reasonable times for the purpose of monitoring compliance with the remedial action plan, including the right to take samples, inspect the operation of remedial action measures, and inspect records.

(e) Allow the state to enforce the restrictions set forth in the covenant by legal action in a court of appropriate jurisdiction.

(f) Require the installation of a permanent marker on each side of the site which describes the restricted area and the nature of the prohibitions specified in the provisions of subdivisions (a) and (b) of this subrule.

(g) Describe uses of the property that are allowed.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5721 Evaluation of data to establish compliance with type A, type B, or type C criteria.

Rule 721. (1) If the criteria in question is below the practical quantitation level, in determining whether available data demonstrate compliance with type A, type B, or type C criteria, the following procedure shall be used:

(a) If a hazardous substance is not detected in a sample and the method detection limit is higher than the criteria to be achieved for that substance, the criteria shall be considered to have been achieved.

(b) If a hazardous substance is reported to be present in a sample above the method detection limit, but below the practical quantitation level, the significance of that data shall be determined by a method acceptable to the department, considering the number of samples, the distribution of data, and other factors influencing the selection of a statistical method.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5723 Determination of type B criteria for carcinogens in groundwater.

Rule 723. (1) Type B groundwater criteria shall be determined for each carcinogen according to the procedures specified in subrule (2) of this rule.

(2) The concentration corresponding to an increased cancer risk of 1 in 1,000,000 shall be calculated according to the following algorithm, using the procedure set forth in subdivision (a) or (b) of this subrule:

$$C = \frac{D \times W_h}{WC}$$

Where:

C = Concentration of the carcinogen (mg/l)

D = Dose as derived in subdivision (a) or (b) of this subrule

W_h = Weight of an average human (70 kg)

WC = Daily water consumption (2 liters per day)

The procedure used for calculations pursuant to this subrule is as follows:

(a) The dose (D) may be derived from appropriate human epidemiological data on a case-by-case basis. The department may seek the advice of experts in determining the dose.

(b) When appropriate human epidemiological data are not available, a nonthreshold mechanism shall be assumed for carcinogens which have not been adequately demonstrated to cause cancer by a threshold mechanism. The dose (D) shall be the concentration estimated to cause 1 additional cancer over the background rate in 1,000,000 individuals who are exposed to that concentration calculated using the following method:

(i) Cancer potency values (q_1^*) based on best available information.

(ii) All carcinogenesis bioassay data shall be reviewed and data of appropriate quality shall be used for the quantitative risk estimations.

(iii) The data shall be fitted into the multistage model using a linearized multistage computer model. The lower 95% confidence limit on dose at the 1 in 1,000,000 risk level shall determine the slope, q_1^* (animal). The slope q_1^* (animal) shall be taken as an upper bound of the potency of the chemical in inducing cancer at low doses. When the multistage model does not fit the data sufficiently, data at the highest dose shall be deleted and the model refitted to the rest of the data. This procedure shall be continued until an acceptable fit to the data is obtained. To determine whether a fit is acceptable, the chi-square statistic:

$$X^2 = \sum_{i=1}^h \frac{(X_i - N_i P_i)^2}{N_i P_i (1 - P_i)}$$

is calculated, where N_i is the number of animals in the i^{th} dose group, X_i is the number of animals in the i^{th} dose group with a tumor response, P_i is the probability of a response in the i^{th} dose group estimated by fitting the multistage model to the data, and h is the number of remaining groups. The fit is determined to be unacceptable when chi-square is larger than the cumulative 99% point of the chi-square distribution with f degrees of

freedom, where f equals the number of dose groups minus the number of nonzero multistage coefficients. If a single study in which a chemical induces more than 1 type of tumor is available, then the response for the tumor type predicting the highest estimate of q_1^* shall generally be used for the risk assessment. If 2 or more studies of equal quality are available, but vary in species, strain, sex, or tumor type, then the data set that gives the highest estimate of q_1^* shall generally be used for the risk assessment. If 2 or more studies exist which are identical with respect to species, strain, sex, and tumor type and are of equal quality, the geometric mean of the q_1^* values from these data sets shall be used. However, where 2 or more significantly elevated tumor sites or types are observed in the same study, extrapolations may be conducted on selected sites or types. These selections shall be made on biological grounds. To obtain a total estimate of carcinogenic risk, animals with 1 or more tumor sites or types that show significantly elevated tumor incidence may be pooled and used for extrapolation. The pooled estimates shall generally be used in preference to risk estimates based on single sites or types. Quantitative risk extrapolations shall generally not be done on the basis of totals that include tumor sites without statistically significant elevations.

(iv) All doses shall be adjusted to give an average daily dose over the study duration.

(v) If the duration on experiment (L_e) is less than 78 weeks for mice or 90 weeks for rats, the slope, q_1^* (animal) shall be multiplied by the factor L^3/L_e , to account for unobserved tumors due to the short study duration. For mice, the natural expected lifespan (L) shall be 90 weeks and for rats the natural expected lifespan (L) shall be 104 weeks.

(vi) A species sensitivity factor shall be used to account for differences between test species and humans. It shall be assumed that milligrams per surface area per day is an equivalent dose between species. The species sensitivity factor may be calculated by dividing the average weight of a human by the average weight of the test species and taking the cube root of the resultant value; the slope q_1^* (animal) shall be multiplied by this factor to obtain the value q_1^* for humans. However, if adequate pharmacokinetic and metabolism studies are available, these data may be factored into the adjustment for species differences on a case-by-case basis. The department may seek the advice of experts outside the department as needed in calculating dose.

(vii) The dose corresponding to an estimated 1 additional cancer in 1,000,000 exposed humans shall be determined by dividing 0.000001 by the value of q_1^* (human).

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5725 Calculation of type B criteria for noncarcinogens in groundwater.

Rule 725. (1) Derivation of the HLSC for substances not determined to cause cancer or to be a genotoxic teratogen or a germ line mutagen shall be conducted according to the following procedure set forth in subrule (2) of this rule.

(2) The minimum toxicity data requirement for derivation of an HLSC shall be an acute oral LD₅₀ for rats, determined as follows:

(a) The HLSC shall be derived from appropriate toxicological data using the following formula, except as provided for in subdivision (b) of this subrule.

$$HLSC = \frac{MgT \left(\frac{mg}{day} \right) \times I_{dw}}{WC}$$

Where: MgT = Maximum amount of toxicant (in milligrams) per day causing no adverse effects to humans when ingested daily for a 70-year lifetime.

WC = Volume of water consumed daily in liters (2 liters)

I_{dw} = Intake of the chemical derived from drinking water. 20% shall be assumed for this value unless data are available to demonstrate that a different source contribution is appropriate.

(b) The HLSC may be derived directly from either of the following provisions:

(i) The HLSC shall equal a maximum contaminant level, expressed in milligrams per liter, if a maximum contaminant level has been established by the United States environmental protection agency.

(ii) The HLSC may equal a final, lifetime health advisory, expressed in milligrams per liter, if such as advisory has been established by the United States environmental protection agency.

(c) The MgT shall be derived by 1 of the following methods depending on the type and quality of the toxicity database:

(i) If a scientifically valid reference dose (RfD) is available through best available information sources:

$$MgT = RfD(mg/kg/d) \times 70 \text{ kg.}$$

(ii) If a chronic or subchronic NOAEL for humans exposed to toxicant contaminated drinking water is available:

$$MgT = \frac{NOAEL (mg/l) \times V_h}{B}$$

Where:

B = Uncertainty factor, chosen according to the following criteria:

B = 10, if extrapolating from valid experimental results in studies using prolonged exposure to average healthy humans.

B = 100, if extrapolating from valid results of long-term studies on experimental animals when results of studies of human exposures are not available or are inadequate.

B = 1,000, if extrapolating from less than chronic results on experimental animals when useful long-term human data are not available.

B = 10,000, if deriving a reference dose from a lowest adverse effect level instead of a NOAEL.

V_h = Volume of water consumed daily by humans (2 liters per day).

(iii) If a scientifically valid acceptable daily intake (ADI) is available from the United States food and drug administration regulations:

$$MgT = ADI (mg/kg/d) \times 70 \text{ kg.}$$

(iv) If a chronic or subacute NOAEL from a mammalian test species exposed to toxicant-contaminated drinking water is available:

$$MgT = \frac{NOAEL (mg/l) \times V_w \times W_h}{B}$$

Where:

V_w = Volume of water consumed daily by test animal (in l/day).

W_a = Weight of test animal (kg).

W_h = Weight of human (70 kg).

B = Uncertainty factor, chosen according to the criteria in paragraph (ii) of this subdivision.

(v) If a chronic or subacute NOAEL from a mammalian test species exposed to toxicant-contaminant food is available:

$$MgT = \frac{NOAEL (ppm) \times C \times W_h}{B}$$

Where:

C = Daily food consumption expressed as a fraction of the animal's body weight.

(vi) If a chronic or subacute NOAEL from a mammalian test species exposed to a toxicant by gavage is available:

$$MgT = \frac{NOAEL (\frac{mg}{kg}) \times F_w \times W_h}{B}$$

Where:

F_w = Fraction of week dosed.

(vii) If an oral rat LD₅₀ is available:

$$MgT = \frac{LD50 (\frac{mg}{kg}) \times M \times W_h}{100}$$

Where:

M = Acute to chronic application factor (0.0001).

(viii) If an acceptable NOAEL is lacking, the lowest observed adverse effect level may be substituted in some cases with an additional uncertainty factor of 1 to 10.

(ix) An HLSC shall generally be derived from data that involve oral exposure. If available oral exposure data are insufficient, it may be useful to use data from other exposure routes. Use of such data shall depend on the pharmacokinetic and toxicological properties of each chemical.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5727 Special considerations for risk assessment.

Rule 727. (1) For the purposes of this part, all polychlorinated dibenzodioxins and dibenzofurans shall be considered as 1 hazardous substance, expressed as an equivalent concentration of 2,3,7,8-tetrachlorodibenzo-p-dioxin, based upon the relative potency of the isomers present at the site.

(2) For the purposes of this part, if 2 or more hazardous substances are present and known to result in toxicological interaction, the interactive effects shall be considered in establishing levels which are protective of the public health and welfare.

History: 1990 MR 6, Eff. July 12, 1990.

PART 8. SITE ASSESSMENT MODEL

R 299.5801 Definitions; A to I.

Rule 801. As used in this part:

(a) "Aquatic life" means all life forms which rely on surface water for existence.

(b) "Category" means any of the 6 major components of the site assessment model. A category shall be 1 of the following:

(i) Environmental contamination.

(ii) Mobility rating.

(iii) Sensitive environmental resource.

(iv) Population.

(v) Institutional population.

(vi) Toxicity/quantity.

(c) "Category subscores" means the points scored for a site for each of the 6 categories in the site screening model.

(d) "Confirmed contamination" means the component of the environmental contamination category scored when analytical data is available to confirm a release of a hazardous substance.

(e) "Containment structure" means any natural or human-made structure which is designed or used for the storage, transport, treatment, or disposal of hazardous substances, and from which substances may be released. The term may include soil and surface waters.

(f) "Contaminant mobility" means the category in which points are assigned based on the potential or actual migration of a hazardous substance.

(g) "Environmental contamination" means the category in which points are assigned for hazardous substance effects on environmental media.

(h) "Environmental media" means any of the following:

(i) Soil.

(ii) Groundwater.

(iii) Surface water.

(iv) Air.

(i) "Human exposure" means the component of the environmental contamination category scored when there is or may be human exposure to a hazardous substance.

(j) "Institutional population" means the category scored when an occupied school, hospital, nursing home, or licensed child care center is located within 1/2 mile of the site. Students or inhabitants of these facilities are not otherwise included in the population category.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5803 Definitions; M to W.

Rule 803. As used in this part:

(a) "Mobile solids" means a solid hazardous substance or a material that contains a hazardous substance which is less than 2,000 microns (2 millimeters) in diameter and which may be transported by the air.

(b) "Natural community" means the association of plants, animals, or combinations thereof found to have a natural symbiotic relationship to one another.

(c) "Population" means the category in which points are assigned on the basis of the population density for the area within 1/2 mile of the site.

(d) "Potential contamination" means the component of the environmental contamination category scored when there is a potential for a hazardous substance to contaminate the environmental media being evaluated.

(e) "Potential toxicity score" means the toxicity rating of a hazardous substance, as determined by the department, which may include its genotoxicity, acute and chronic toxicity, and other adverse effects.

(f) "Receptor" means an individual or a population which may be affected by the release of a hazardous substance.

(g) "Saturated soil" means soils where all voids are filled with liquid.

(h) "Semiliquid" means a substance which is intermediate in properties between a solid and a liquid, but which flows readily.

(i) "Semisolid" means a substance which is intermediate in properties between a solid and a liquid, but which will not flow readily.

(j) "Sensitive environmental resource" means the category in which points are assigned for either a natural community which occurs within 1/2 mile of the site and which has been classified as uncommon, extremely rare, or rare or a plant or animal species which has been classified as endangered or threatened as defined in section 2(d) or (l) of Act No. 203 of the Public Acts of 1974, as amended, being §299.222(d) or (l) of the Michigan Compiled Laws. The term also includes plant and animal species classified as being of special concern. All such classifications are made by the endangered species unit of the wildlife division of the department.

(k) "Site" means the area bounded by the furthest migration of contamination in any direction from a release.

(l) "Site assessment model" means the numerical risk assessment model that is used to establish the relative risk rankings of sites.

(m) "Site score" means the sum of the 6 category subscores in the site screening model.

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(n) "Surface impoundment" means a natural topographic depression, human-made excavation, or diked area which holds an accumulation of liquid that contains wastes. The term may include natural lakes, ponds, or wetlands.

(o) "Surface water" means any body of water and the associated sediments which has a top surface that is exposed to the atmosphere and which is not solely for wastewater conveyance, treatment, or control. Surface water may be any of the following:

(i) Any Great Lake or its connecting waters.

(ii) Any inland lake or pond.

(iii) A river or stream.

(iv) An impoundment.

(v) An open drain.

(vi) A wetland.

(p) "Surficial soil" means the top 6 inches of the ground surface.

(q) "Suspected contamination" means the component of the environmental contamination category scored when analytical data is not available to confirm a release of a hazardous substance, but a release can reasonably be judged to have occurred, based on visual or other evidence.

(r) "Target area" means that area within 1/2 mile of a site.

(s) "Toxicity/quantity" means the category in which points are assigned on the basis of the quantity of hazardous substance or waste and the potential toxicity of the hazardous substance or type of facility which produced the waste.

(t) "Vulnerable aquifer" means an aquifer that is not protected by an aquitard from contamination by hazardous substances.

(u) "Waste" means disposed of or discarded material which contains 1 or more hazardous substances.

(v) "Waste class" means the component of the toxicity/quantity concern category that is scored on the basis of the facility type or waste source.

(w) "Well log" means the record of earth materials and other data recorded by a licensed well driller pursuant to the provisions of part 127 of Act No. 368 of the Public Acts of 1978, as amended, being §333.12701 et seq. of the Michigan Compiled Laws.

(x) "Wetland" has the meaning defined in section 2(g) of Act No. 203 of the Public Acts of 1979, being §281.702(g) of the Michigan Compiled Laws, and known as the Goemaere-Anderson wetland protection act.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5805 Risk assessment model.

Rule 805. The numerical risk assessment model used for assessing the relative present and potential hazards of sites included in the listings provided to the legislature in accordance with the provisions of section 6(d) of the act shall be as described in this part.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5807 Scoring procedure.

Rule 807. (1) Category scores shall be determined for each site in accordance with the provisions of this rule and R 299.5801 to R 299.5805 and R 299.5809 to R 299.5821 and shall be recorded on a site scoring sheet illustrated in figure 1, as follows:

R 299.5807

DEPARTMENT OF NATURAL RESOURCES

88



FIGURE 1 (Cont.)

FIGURE 1 (Cont.)
SITE SCORING SHEET

CATEGORY**CATEGORY
SUB-SCORE**

Sensitive
Environmental
Resource
(3 points Max)

Natural
Communities

Uncommon

Rare

Extremely
Rare

Plants/Animals

Special concern

Threatened

Endangered

One occurrence

1

2

3

Two occurrence

2

3

3

Three or more

3

3

3

☐

Population
(4 points Max)

Density per
square mile

Points

1 - 10

1

11 - 100

2

101 - 1,000

3

1,001 or more

4

☐

Institutional
Population
(1 point Max)

Presence of one or more institutions in target area

1

☐

ENVIRONMENTAL CONTAMINATION RESPONSE R 299.5807

FIGURE 1 (Cont.)
SITE SCORING SHEET

CATEGORY		CATEGORY SUB-SCORE				
Method A						
Identified Chemical(s)	Chemical Quantity (Kilograms)	<10	Potential Toxicity Score		30 - 50	>50
			10 - 19	10 - 29		
	<25	1	2	5	7	9
	25 - 2,500	3	5	7	9	11
	2,501 - 20,000	5	7	9	11	13
	>20,000	7	9	11	13	15
Method B						
Unquantified Chemical	Chemical Concentration (Parts per billion)	< 10	Potential Toxicity Score		30 - 50	>50
			10 - 19	10 - 29		
	1 - 100	1	3	5	7	9
	101 - 1,000	3	5	7	9	11
	1,001 - 10,000	5	7	9	11	13
	>10,000	7	9	11	13	15

Contaminant and concentration of which unquantifiable site's toxicity was based:

FIGURE 1 (Cont.)
SITE SCORING SHEET

CATEGORY**CATEGORY
SUB-SCORE**

Method C

Unidentified Chemical(s)	Quantity of waste		Waste Class			
	(Cubic Meters) or (Acres)		D	C	B	A
	<50	<0.5	3	5	7	9
	50 - 500	0.5 - 10	5	7	9	11
	501 - 2,500	11 - 60	7	9	11	13
	>2,500	>60	9	11	13	15

Waste source on which unknown contaminant waste characterization was based:

Special Wastes Severely Toxic Waste = 15

☐

Total possible points = 48

Total Site Points

Scored by _____

Date _____

☐

(2) Zero points shall be awarded to categories when the conditions of this rule and R 299.5809 to R 299.5821 are not met.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5809 Environmental contamination category.

Rule 809. (1) Environmental contamination includes all of the following subcategories:

- (a) Potential contamination.
- (b) Suspected contamination.
- (c) Confirmed contamination.
- (d) Human exposure.

(2) The environmental contamination category subscore shall be the sum of the highest point value applicable to each environmental media, not to exceed 20 points total.

(3) The potential contamination subcategory shall be scored according to the following criteria:

(a) One point shall be scored for soil if the containment structure or structures is of suspect or inadequate integrity and a release would contaminate soils.

(b) One point shall be scored for groundwater if a site overlies a vulnerable aquifer. The vulnerability of an aquifer shall be determined by consulting local well logs, hydrogeological studies, or published sources of information about geology and hydrogeology in the area of the site.

(c) One point shall be scored for surface water if a surface water body or wetland is located within 1/2 mile of the site.

(d) One point shall be scored for air if a containment structure which is located at or within 12 inches of the ground surface and which is judged to contain volatile liquids or mobile solids is of suspect or inadequate integrity. Zero points shall be scored for air if a containment structure is empty.

(e) When a hazardous product is stored in inadequate or suspect containment, it shall be considered to be a discarded hazardous substance and shall be scored under this subrule.

(4) The suspected contamination subcategory shall be scored according to the following criteria:

(a) Three points shall be scored for soil if there has been a release to soils or there is waste in the surficial soils, but the release has not been confirmed with analytical data.

(b) Three points shall be scored for groundwater if any 1 of the following conditions is judged to be attributable to a hazardous substance associated with the site:

(i) There has been a release to the groundwater, but the release has not been documented with analytical data.

(ii) A sheen is visible on an exposed groundwater surface.

(iii) A hazardous substance or waste is in contact with groundwater.

(c) Three points shall be scored for surface water if any 1 of the following conditions is judged to be attributable to a hazardous substance associated with the site:

(i) There has been a release to the surface water, but the release is not documented with analytical data.

(ii) Leachate or contaminated groundwater is entering surface water.

(iii) Stained soils are in contact with surface water.

(d) Three points shall be scored for air if any 1 of the following conditions is judged to be attributable to a hazardous substance associated with the site:

(i) There is an open container or surface impoundment that contains volatile compounds.

(ii) An obnoxious or chemical odor that is associated with a hazardous substance has been confirmed at the site by state or local agency personnel and is attributable to the site being scored.

(iii) Volatile compounds are present in uncovered surficial soils.

(iv) An emission of dust or particulate matter is observed from a known contamination area.

(v) A vapor cloud is observed emanating from a containment structure or contaminated area.

(5) The confirmed contamination subcategory shall be scored according to the following criteria when there is a release from a containment structure that is documented by quantitative analytical data:

(a) Six points shall be scored for soils if quantitative analytical data documents a release to soils.

(b) Six points shall be scored for groundwater if quantitative analytical data documents the presence of a hazardous substance in groundwater.

(c) Six points shall be scored for surface water if either of the following exists:

(i) Analytical data which document a hazardous substance in surface water or sediment.

(ii) A documented fish kill, fish tissue contamination, or other adverse impact on wildlife or aquatic life which is attributable, wholly or in part, to the site being scored.

(d) Six points shall be scored for air if air sampling data document the presence of a hazardous substance being transported by air beyond the property boundary and the hazardous substance is attributable to the site.

(6) The human exposure subcategory shall be scored according to the following criteria when there has been, or may be, a human exposure to contaminants:

(a) Nine points shall be scored for soil if hazardous substances are present at the soil surface and the area of contamination is accessible or efforts to restrict access to the area of contamination have been unsuccessful and the site is unlikely to be secured.

(b) Nine points shall be scored for groundwater if the department of public health has recommended that a potable water supply well that serves 59 or less people not be used due to hazardous substance contamination that is attributable to the site and a permanent alternate water supply has not been provided.

(c) Twenty points shall be scored for groundwater if the department of public health has determined that 1 or more groundwater supplies that collectively serve 60 or more people are contaminated with a hazardous substance that is attributable to the site.

(d) Nine points shall be scored for surface water if any 1 of the following conditions exists:

(i) A bathing beach exists within the site boundaries on a surface water body with documented hazardous substance contamination.

(ii) The department of public health has issued a fish advisory for a water body and the cause of such an advisory can be attributed, in part, to the site.

(iii) If the department of public health has determined that at least 1 potable surface water intake that serves 59 or less people is contaminated with a hazardous substance attributable to the site and a permanent alternate water supply has not been provided.

(e) Twenty points shall be scored for surface water if either of the following conditions exists:

(i) The department of public health has determined that at least 1 potable surface water intake that serves 60 or more people is contaminated with a hazardous substance that is attributable to the site.

(ii) The department of public health has issued a fish advisory for a water body and the cause of such an advisory can be attributed wholly to the site.

(f) Nine points shall be scored for air if analytical data from air sampling, surficial soil, or other environmental samples indicate that airborne hazardous substances from the site have reached or affected a receptor beyond the property boundary of the source area.

(g) Twenty points shall be scored for air if 15 or more residences being receptors meet the criteria specified in subdivision (f) of this subrule.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5811 Mobility rating.

Rule 811. (1) The contaminant mobility score on the site scoring sheet illustrated in figure 1 of R 299.5807 shall be assigned using the mobility ratings in table 1.

(2) Mobility ratings shall be based on physical state at the time of disposal, unless a special condition in table 1 applies.

(3) A mobility rating of 5 shall be scored when there has been a documented release to the air, groundwater, or surface water.

(4) When more than 1 mobility rating applies to a site, the highest rating shall be used.

(5) The category subscore shall be of the highest mobility rating applicable to any hazardous substance at the site, not to exceed 5 points.

(6) Table 1 reads as follows:

TABLE 1

MOBILITY RATINGS

Physical State of Hazardous Substance	Mobility Rating
Immobile solid (particle size greater than 2000 microns in diameter)	1
Semisolid	1
Semiliquid	1
Liquids and gases/mobile solids	3
Special Conditions	Mobility Rating
Contaminated soils	
Immobile dry solids	1
Saturated/mobile solids	3
Landfills	1
Landfills with leachate present	3
Hazardous substances in groundwater	5
Hazardous substances in surface water	5
Hazardous substance transported by air	5

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5813 Sensitive environmental resource category.

Rule 813. (1) The sensitive environmental resource category shall be scored when either or both of the following conditions exist:

(a) A natural community that is located within 1/2 mile of the site has been classified by the department as extremely rare, rare, or uncommon.

(b) A plant or animal that is located within 1/2 mile of the site has been classified by the department as endangered, threatened, or of special concern.

(2) Points shall be assigned according to the criteria shown in figure 1 of R 299.5807.

(3) The sensitive environmental resource category subscore shall consist of the sum of the points shown in figure 1 of R 299.5807 for the number of occurrences of sensitive environmental resources. The sensitive environmental resource subscore shall not exceed 3 points.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5815 Population category.

Rule 815. (1) The population category subscore shall be determined from the criteria in the site scoring sheet illustrated in figure 1 of R 299.5807, considering the population density within 1/2 mile of the site or the number of people who are potentially exposed through an exposure pathway that extends outside the target area, whichever is greater.

(2) The determination of population densities shall be based upon the best data that is readily available to the department.

(3) Two points shall be scored when the population density within 1/2 mile of the site is less than 11 people per square mile, but more than 10, and less than 101, people are potentially exposed to a hazardous substance attributable to the site through an exposure pathway that extends outside the target area.

(4) Three points shall be scored when the population density within 1/2 mile of the site is less than 101 people per square mile, but more than 100, and less than 1,001, people are potentially exposed to hazardous substances attributable to the site through an exposure pathway that extends outside the target area.

(5) Four points shall be scored when the population density within 1/2 mile of the site is less than 1,001 people per square mile, but more than 1,000 people are potentially exposed to hazardous substance attributed to the site through an exposure pathway that extends outside the target area.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5817 Institutional population.

Rule 817. When at least 1 occupied school, hospital, licensed child care center, or nursing home exists within 1/2 mile of a site, the institutional population subscore shall be 1 point.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5819 Toxicity/quantity category.

Rule 819. (1) The toxicity/quantity category shall be scored on the site scoring sheet illustrated in figure 1 of R 299.5807 according to the criteria described in this rule.

(2) The total quantity of waste on site shall not include any material that is properly stored in compliance with all applicable state and federal laws and regulations.

(3) Scoring shall be done according to 1 or more of the following methods described in subdivisions (a), (b), and (c) of this subrule:

(a) Method A shall be used to score all hazardous substances at a site which have known identities and quantities or which can be determined from representative sample data. When more than 1 quantifiable hazardous substance is present at the site, a weighted average for the potential toxicity scores of the known compounds shall be calculated by multiplying the potential toxicity score for each quantified hazardous substance by the quantity in kilograms of that substance on the site, summing the values, and dividing by the total quantity of hazardous substances on the site. The toxicity/quantity category score shall be determined on the site scoring sheet illustrated in figure 1 of R 299.5807 using the potential toxicity score, or weighted average potential toxicity score, and the total chemical quantity.

(b) Method B shall be used when the identity of a hazardous substance is known, but the release cannot be quantified. When more than 1 hazardous substance is present at the same site, the hazardous substance that provides the highest score shall be used. The highest measured concentration from the most recent 12 months of sampling shall be used. The toxicity/quantity category score shall be determined by determining the applicable scoring ranges for potential toxicity and concentration on the site scoring sheet illustrated in figure 1 of R 299.5807.

(c) Method C shall be used to score all hazardous substances at a site which cannot be identified, but which have quantities that are known or can be estimated. For this method, the waste shall be characterized according to the type of facility or process associated with the production of the hazardous waste substance, as contained in table 2. If more than 1 type of facility or process is associated with a site, the classification which best characterizes the suspected source of the environmental contamination shall be used. If a facility or process which must be characterized is not found in table 2, the class which best approximates the facilities waste stream, when compared to other facilities in that class, shall be assigned. The toxicity/quantity category score shall be determined on the basis of the applicable scoring ranges for waste class and quantity on the site scoring sheet illustrated in figure 1 of R 299.5807.

(d) When the quantity of waste is unknown, but the identity of the suspected or failed containment structure is known, assume a onetime total volume loss, unless the contaminant is petroleum. Toxicity/quantity category scores for petroleum losses shall be scored according to the criteria set forth in subrule (5) of this rule.

(e) To estimate the volume of a lagoon when the depth is unknown, the depth shall be assumed to be 3 meters.

(f) To estimate the volume of contaminated soils when the depth of contamination is unknown, assume the depth to be 1 meter.

(g) When data availability allows for all of the hazardous substances at a site to be scored with 1 method, method A is the most preferred, and method C is the least preferred. The method shall be determined by the availability of data.

(h) When data availability requires that more than 1 method for scoring the toxicity/quantity category be used, hazardous substances at the site shall be combined on the basis of data availability and each group scored separately using the most appropriate method. The highest score of any 1 method shall be used as the toxicity/quantity score for the site.

(4) When hazardous substances are identified as gasoline or fuel oil, a potential toxicity score of 21 shall be used.

(5) When the quantity of petroleum released cannot be estimated, method A shall be used, based on the following quantity assumptions:

(a) Releases from incidental spills, transfer spills, residential tanks, or other small-volume releases shall be assumed to be 300 gallons.

(b) Releases from commercial underground storage tanks, tanker accidents, or other large-volume releases shall be assumed to be 3,000 gallons.

(6) Score 15 points for the toxicity/quantity category when any of the following severely toxic wastes are present at a site in concentrations above 1 part per billion in soils and 0.001 part per billion in groundwater or surface water:

(a) 2,3,7,8-tetrachlorodibenzo-p-dioxin and all other tetrachlorodibenzo-p-dioxins.

(b) 1,2,3,7,8-pentachlorodibenzo-p-dioxins and all other 2,3,7,8 substituted pentachlorodibenzo-p-dioxins.

(c) 1,2,3,6,7,8-hexachlorodibenzo-p-dioxin and all other 2,3,7,8 substituted hexachlorodibenzo-p-dioxins.

(d) 2,3,7,8-tetrachlorodibenzofuran and all other 2,3,7,8 substituted pentachlorodibenzofurans and hexachlorodibenzofurans.

(7) Table 2 reads as follows:

TABLE 2

Waste Class A

(Typical waste sources or facility types)

Pharmaceutical production
Chemical formulation
Explosives production
Heavy metals
Wood treatment
Chemical treating
Plating shops
Chemical bonding
Printed circuits
Large assembly plants
Polymer synthesis
Solvent storage
Chemical coating
Petroleum or natural gas production, storage, refining, and transportation facilities
Oil-based paint production
Petroleum bulk storage
Agricultural pesticides
Metal coating
Organic chemical production
Hazardous waste hauling, storage, or treatment facility
Dyes and pigments
Oil or solvent recycling
Landfill - more than 50% industrial waste

Waste Class B**(Typical waste sources or facility types)**

Primary metals production
Metal processing
Small assembly plants
Iron mining
Inorganic chemical production
Copper mining
Adhesive/sealant production
Iron steel foundry
Body work and paint shops
Railroads
Pulp and paper production
Rubber products production
Gasoline station
Battery production/recycling
Auto manufacturing
Fuel transport
Leather tanning
Chemical transport
Barrel reclaiming
Engine component manufacturing
Charcoal manufacturing
Clay/glass production
Heavy manufacturing
Landfill - more than 10 to 50% industrial waste

Waste Class C**(Typical waste sources or facility types)**

Product assembly
Boat assembly
Plastic molding
Medical/hospital
Soap and detergent production
Machining formulation
Tool and die
Metal stamping/forging
Aircraft assembly
Consumer packaging
Latex paint production
Furniture stripping
Laundry/dry cleaner
Laboratory waste
Coal gasification
Coal ash or foundry sands
Scrap metal yard
Cleaning transport vehicles

Appliance manufacturing
Plastics fabrication
Light manufacturing
Auto repair
Landfill - 1 to 10% industrial waste
Gas/oil drilling
Fertilizer storage and processing
Auto junkyard
Asphalt, roofing production

Waste Class D

(Typical waste sources or facility types)

Sanitary landfill - domestic or commercial wastes only
Dump - domestic or commercial wastes only
Recycling center
Salt storage
Food processing
Poultry farming
Printing
Brine use/disposal
Hog farming

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5821 Site score.

Rule 821. The site score shall be the sum of the category subscores on the site scoring sheet illustrated in figure 1 of R 299.5807.

History: 1990 MR 6, Eff. July 12, 1990.

R 299.5823 Procedure for changing numerical risk assessment model.

Rule 823. (1) On an annual basis, the department shall review the numerical risk assessment model provided for pursuant to section 6(c) of the act. Such review shall consider public comments received at any time throughout the year that concern the numerical risk assessment model.

(2) Any changes in the numerical risk assessment model shall be made pursuant to the provisions of Act No. 306 of the Public Acts of 1969, as amended, being §24.201 et seq. of the Michigan Compiled Laws, and known as the administrative procedures act.

History: 1990 MR 6, Eff. July 12, 1990.